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**THE CONSEQUENCES OF MIGRATION FROM
HUNGARY TO ABROAD FROM THE ASPECT OF
EDUCATION COSTS AFTER 1989**

Theses of a Doctoral Dissertation (PhD)

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1. Reasons for selecting this theme

Migration from Hungary country to abroad was of a low level in the years that followed the political system transformation of the country. This did not increase significantly even after we joined the European Union, until 2008. However, the number of people migrating abroad has been continuously increasing ever since. The main reason for my selecting this theme for my doctoral dissertation was my experience that an increasing number of my friends and colleagues wish to go abroad for a shorter or longer period, and some of them already live and work there. All these facts encouraged me to how many students plan to go abroad from the currently studying generation, and for how long and due to what reasons. I also asked myself later on what impact this expected emigration will have on Hungary, on its economy, its society and its workforce market. At the same time, I wanted to examine not only the reason and impact of emigration, but also the way the capital of the individual and of the society that is invested into the emigrants will be refunded, if these young people will go abroad for a short time or permanently, in line with their plans. I primarily focused on the education related costs of the total capital that is invested into the individuals until their emigration, because probably this is its largest item. Studying the relevant literature, may be seen that this topic was not accompanied by a great attention. This also supported my intention to examine the education related consequences of emigration.

2. Targets set and the hypotheses

I examined in my dissertation migration from Hungary to the other member states of the European Union from among the diverse and multi-

directional migration processes that take place within the European Union. I reviewed first the theoretical background of migration, the history of the European and Hungarian migration processes, and the changes that take place in the migration policy of the European Union and the migration processes of our days. I examined the changes that have taken place in the area of Hungarian migration after the political system transformation of the country, then after our joining the European Union in 2004, as well as after the termination of the barriers of free workforce flow, that is, since 2011.

The purpose of my research was to define what migration tendencies are expectable in Hungary in the future, and how these migration processes will influence the budget expenditures of Hungary and its refunding, primary through the costs of education. Through empirical research and education cost refunding studies I tried to defined the future expectable impacts of migration on Hungary, both from economic, workforce market and societal aspects, in case the level of emigration will remain at the same level in the future as well.

In the course of my empirical research, I studied migration from Hungary to abroad as regards the groups of secondary school students, students learning in the high education institutions and the workers, moreover, I examined the money the Hungarian state spent and spends for the education of young people learning at present in the secondary schools and high education institutions, which will be refunded only partially or will not be refunded at all due to emigration. In addition to this, based on the currently available data, I tried to estimate how much revenue loss it would mean for Hungary if these young people or workers will go abroad, due to the lost taxes and contributions. I examined in my dissertation the education costs not only on societal level, but from the aspect of individual-family expenditures as well.

The basic purpose of the research was to examine and verify the following hypotheses.

Hypothesis 1: The main reasons of emigration in all the three examined age groups were primarily economic in nature.

Hypothesis 2: The intention to work abroad is high in each of the three examined age groups, but assumably it is the highest among the students, who attend high education.

Hypothesis 3: The emigration of the young people causes significant financial loss for Hungary, because of the education costs and the lost incomes.

Hypothesis 4: The highest refunding is provided by university educations, based on the calculations.

Hypothesis 5: The biggest loss is caused by the permanent or long-term emigration of those people, who have university or college education, due to their high migration intentions and high education costs.

3. The structure of the dissertation

My dissertation consists of six main sections.

Section 1 introduces the conceptual and theoretical background of migration. It analyses in detail the types of migration and the impacts of migration on the sending and the receiving countries, as well as the consequences of migration. The section also introduces the different migration related theoretical models.

Section 2 section explores the historical background of migration in Europe. It introduces the main phases of the migration politics of the European Union up to our days.

Section 3 examines the migration processes of Hungary. It provides an overview on the historical background of Hungarian migration, then introduces in detail the Hungarian migration processes starting with the beginning of the 20th century.

Section 4 summarises the theoretical background of the economics of education, pointing out the importance of education as regards the economy and the calculation methodologies that are connected to the refunding of education.

Section 5 evaluates the results of empirical research in respect of all the three age groups. It analyses in detail the extent of the intention to migrate abroad based on the empirical research, including its reasons and the target countries of emigration. The section introduces the refunding calculations of the education costs and their results through both the societal and the individual expenditures, and in addition to this, it also examines the negative and positive societal impacts emigration has.

Section 6 explores the main conclusions derived from the results of empirical research and of the educational cost calculation. It tries to provide an outlook on the future, assuming that the emigration intentions will not change, and it determines what impacts emigration may have, if those who plan to emigrate today will actually leave our country in the future.

4. Methods applied

I carried out the research with the aid of different methods. Library research work was needed for the theoretical background of the thesis, in the course of which I analysed different sources and different historical

statistics. I obtained the statistical data primarily from the Central Statistical Office of Hungary and the website of Eurostat. The Web of Science scientific portal and the international publications that are available in the different libraries were the primary sources of the related foreign literature. The sources of the data used for the calculations of education refunding from the aspect of the economy were empirical research and Volume 2013/2014 of the Education Almanacs.

I carried out the empirical research in the case of three age groups in order to have a better society coverage. I implemented the questionnaire based survey among the workers in November-December 2015, among the secondary school students between January and March of 2016, and among the high education students between March and July 2016. The three groups of those asked were people learning at the different levels of education: students, who were graduating class students studying in secondary schools at present, the college students of day-time and correspondence classes, and the people, who were already working. The questionnaire was filled in altogether by 1850 persons, that is, 1307 secondary school students, 363 high education students and 180 workers answered the questions. In the case of the secondary school students I had the questionnaire personally filled in through the internet at the schools with the permit of the directors and by sending the questionnaire to the schools by post also with the permit of the director. In the case of the high education students I had the questionnaire filled in with contacting them personally through the internet or with the assistance of the teachers. In the case of the workers, I used primarily the method of contacting them personally.

I took into consideration several methods for calculating the refunding of the education costs. Finally, I reviewed the refunding of the education costs with the short-rate refunding model, using the methods of

calculating the number of refunded cases, the period of refunding, and the net current value. I used the Khi square test and the Cramer's V method for exploring the associative relationship between the data that were obtained in the course of empirical research.

I carried out the calculation with the SPSS (Statistical Package for the Social Sciences) statistical programme and the Excel programme. I prepared the formulas in the formula editing programme of Word. I introduced the data in the dissertation with the aid of diagrams and tables in the interest of better transparency and comparability.

5. Results of the research

The dissertation first covers the relationship between emigration and the refunding of the education costs. When selecting the theme of the research, the target was to introduce the rate of emigration from Hungary and to explore the expectable trends of emigration in the case of the current secondary school students, the high education students and the people, who already work. The target of the research included determining the state financed education costs of young people, exploring the extent of individual education expenditures invested, and defining the refunding period of the education costs of the state with the aid of different methods. The main target of the research was to explore the expectable trends of migration and to define the deficit of the state budget due to the costs of education, that will be caused by emigration.

In the course of examining the theoretical background of migration I found that the concept, the reasons of migration and the related models had been already examined by a number of researchers from several aspects and

in a number of scientific areas. The concept of migration is a very complex issue, and there are a number of reasons that may trigger migration. Migration may exert different impacts on the sending and on the receiving countries, however, these impacts may be significantly influenced by the demographic, societal and economic characteristics of the persons migrating.

Migration is a process that is continuously present in the history of mankind from the very beginning. It continuously influences the history of Europe and within Europe of Hungary. The history of our country was often simultaneously characterised with voluntary migration, migration motivated by economic reasons and by forced migration. The rate of migration did not increase in Hungary after the political system transformation. Based on the data of the statistical offices migration from Hungary to abroad has been increasing continuously since 2008.

I examined in my dissertation in a separate section the theoretical background of education economics and also the practical calculation methods that are connected to it, with the aid of both the Hungarian and the international related literature.

I prepared my empirical research in respect of three age groups partially with the purpose of defining the extent of expectable future migration in a wider age range as well. The results of the empirical research revealed that in the case of all the three age groups the migration intention is high, and the reasons of migration include the better salary, the better living standard that are available abroad, adventurousness and the intention to learn languages. The primary target countries of emigration are the United Kingdom, the United States of America and Germany.

Another target of my research was to introduce the cost of migration through education. In the case of permanent emigration, the education costs

that are invested by the state into young people together with all its other costs will not be refunded, if the person goes abroad to work and does not return home. I used several methods for calculating the education costs in order to define after what duration the emigration of young people may be considered to be a loss producing phenomenon. The purpose of the calculation was to define after how much time the education of the young people would be refunded with a given income, if they would stay at home, that is, how much time they have to work at home for refunding the education costs that the state spent on them. At the same time, even if the cost of education is refunded in the case of permanent emigration, the tax and contribution revenue loss, that is caused by the person not working and not paying the taxes and contributions in Hungary also means a significant loss for our country.

The number of those, who plan to work abroad is high on the basis of the result of the empirical research, however, the number of those is low, who want to go abroad for good already now. At the same time, the ratio of those is also high, who are uncertain about whether they want to return or not. And the length of the time of staying abroad influences the refunding of the education costs.

At the beginning of my thesis I defined the following five hypotheses:

Hypothesis 1: The main reasons of emigration in all the three examined age groups were primarily economic in nature.

The first hypothesis from among the five hypotheses is fully supported by my research, although it is important to emphasise that in the case of each of the three age groups the economic factors are outstanding

from among the factors that influence emigration, but at the same time, in the case of the secondary school students the intention to learn languages and adventurousness are also outstanding reasons. In the case of the high education students the intention to learn languages was also an important influencing factor in addition to the economic reasons.

Hypothesis 2: The intention to work abroad is high in each of the three examined age groups, but assumably it is the highest among the students, who attend high education.

In the case of the second hypothesis I assumed in the beginning of the research that the emigration intention will be the greatest among the high education students, since they have high level qualifications, and at the same time they still do not have their own families, and therefore they are less tied by their families, therefore they are more independent. And based on the research the ratio of those, who plan to undertake work abroad was the lowest in the case of high education students, however, the ratio of those high education students, who were planning to study abroad was still higher than that of the secondary school students.

Hypothesis 3: The emigration of the young people causes significant financial loss for Hungary because of the education costs and the lost incomes.

In the case of the third hypothesis I expected that the emigration of the young people causes significant financial loss for Hungary due to the education costs and the lost incomes. This hypothesis is fully supported by the empirical research and the calculations, although it is also a fact that the

emigration of the workers also produces a financial loss due to the lost incomes.

Hypothesis 4: The highest refunding is provided by university educations based on the calculations.

The fourth hypothesis is supported only partially by the research. The refunding rate was the highest in the case of those, who have university and college education. It cannot be declared unambiguously that the university education produces the highest refunding rate, but it may be declared that the refunding of high-level education is the highest.

Hypothesis 5: The biggest loss is caused by the permanent or long-term emigration of those people, who have university or college education, due to the high migration intentions and high education costs.

Empirical research and the calculations fully supported the fifth hypothesis, since the education cost is the highest of the university and college students, therefore it may be assumed that they will have the highest income, and therefore their leaving would cause a significant loss for our country.

6. New and novel results

My dissertation is novel since it tries to connect the research activities that are connected to the refunding of education and those that are connected to migration. The refunding of the costs that are spent by the

society on education expenditures and the expectable future development of emigration had been examined already by several researchers, but these two aspects jointly were accompanied by little attention so far.

A significant part of the current research activities focuses on the already emigrated people. I examine in detail in my dissertation the future emigration related intentions of secondary school students and high education students and those, who work in Hungary at present, their reasons and their destinations. I examined separately the extent of studying purpose and working purpose migrations and their reasons in the case of students.

I defined with the aid of different statistical and mathematical methods the refunding period of state education expenditures on the basis of the data of state education expenditures.

On the basis of the results of the empirical research I tried to define not only the extent of the state expenditures, but the extent of individual and family education related cost as well.

Based on the results of empirical research and the available earning data I tried to provide an overview as regards the future on the impact of emigration on the state budget through the lost tax and contribution revenues.

By associating the education expenditure related results with the migration related results of empirical research I tried to define as regards the future the expected demographic, societal, economic and workforce market impacts of emigration, assuming that the extent of emigration will not decrease based according to the results of empirical research.

7. Conclusions

Based on the research made covering the three age groups we may conclude that permanent emigration means financial, knowledge, societal and demographic loss for our country. A short work undertaken abroad for a short time or for a couple of years, due to the moneys transferred home and the additional knowledge acquired abroad, due to its subsequent utilisation on the Hungarian workforce market, will not cause a budget deficit for our country according to the expectations. It may even happen that it will produce a positive impact through the additional knowledge acquired abroad and utilised domestically. Moreover, since these persons go abroad only for a short time, the expenditures spent on their education according to the expectations will be refunded due to the subsequent jobs they will find on Hungarian labour market. And it may be also expected that they will spend in Hungary the income they earn in the course of working abroad, therefore, the lost tax and contributions, generated by their working abroad will be refunded for Hungary.

Permanent and long-term emigration exerts a negative impact on the Hungarian economy, on the local workforce market and on the demographic structure of the country. In the case of those, who already work, a part of or the entire education expenditures spent on them had been already refunded, but in the case of those, who still study, if they will not fill in a job on the Hungarian workforce market after completing the school, but will go straight away abroad, the expenditures spent on them will not be fully refunded. If after working for one-two years in Hungary they go abroad, but for good, only a part of the education costs will be refunded to the Hungarian budget. Their emigration may cause a significant revenue loss

for our country, because they will pay the taxes and the contributions abroad, and they will invest, they will spend their income abroad.

The intention of emigrating permanently is the highest among the workers, based on the answers that were given by the different age groups. Based on the results of the empirical research a significant part of them would emigrate with their families, therefore their migration would be a very significant loss from the aspect of the population of Hungary. The refunding of the costs that was spent on their education in their case is more favourable since they already worked in Hungary and therefore a part or the entire expenditures that were spent on their education had been already refunded to the Hungarian state. At the same time, the education of their children had not been refunded at all, and this appears also as non-refunded cost expenditure for the Hungarian state in the case of permanent emigration. A further negative impact of emigration is the fact that the emigrants do not pay taxes and contributions in Hungary, and this also means an income loss for the Hungarian state. If they will remain for a long term or permanently abroad with their children, this may mean a negative demographic impact in the long term for the society of Hungary, which is aging anyway even without this.

Emigration exerts a negative impact on the workforce market already now in several economic sectors. If those planning to emigrate will actually leave Hungary – especially if for a longer term – that may further increase the number of sectors in Hungary that have to face a deficiency in the workforce market and it may significantly hinder the supply of the new generation of workers for the local workforce market.

8. Publications

Articles, studies

Mikó E. (2017): Development of Hungarian migration from the years of the 1800ies until our days, with an outlook on the future, Valóság, Volume 2017/7, ISSN 0324-7228

Hornyák E., Kalmár E., Mikó E. (2016): Eine vergleichende Analyse von Tendenzen der Wirtschaft, Gesellschaft und Migration im Burgenland und im Komitat Győr-Moson-Sopron In: Pädagogischen Hochschule Burgenland (Edit.) Ph publico. Eisenstadt: E. Weber Verlag GmbH, 2016. pp. 89-104. (ISBN:9783852535616)

Mikó E. (2016): The current situation and the expectable development of emigration from Hungary, Debreceni Szemle 2016:(4) pp. 458-467. (2016)

Mikó E. (2015): Hungary in the changing world (on Patai Mihály – Parragh László – Lentner Csaba: Hungary in the changing world) Hitelintézeti szemle / Financial and economic review 14:(4) pp. 168-172. (2015)

Mikó E. (2015): Hungary in the changing world (on Patai Mihály –Parragh László –Lentner Csaba: Hungary in the changing world) Financial and economic review 14:(4) pp. 170-174. (2015)

Conference lectures, Volumes

Mikó E. (2016): Migration prospects of Hungary based on the experiences of a secondary school survey In: Karlovitz János Tibor (Edit.) Society, Cultural Background, Economy: IV. IRI Society Science Conference. 488 p. Place and time of conference: Štúrovo, Slovakia, 2016.04.24-2016.04.26. Komárno: International Research Institute, 2016. pp. 171-178. (ISBN:978-80-89691-33-3)

Mikó E. (2016): Migration from Hungary in view of the generation differences In.: Keresztes Gábor (Edit.) 2016 = Spring Wind 2016: Study Volume. Volume II: Theology, literature science, chemistry and environment science, communication science, economics. 584 p. Place and time of conference: Budapest, Hungary, 2016.04.15-2016.04.17. Budapest: National Association of PhD Students, 2016. pp. 373-385. (ISBN:978-615-5586-09-5)

Mikó E. (2015): The working of young people abroad based on a questionnaire survey In.: Lőrincz Ildikó (Edit.) XVIII. Apáczai-days. Scientific conference: Quid est veritas? (Jn 18,38): The relationship of theories, hypotheses and the truth. 527 p. Place and time of conference: Győr, Hungary, 2014.10.21-2014.10.22. Győr; Sopron: NYME Apáczai Csere János Faculty; West Hungarian University Publisher, 2015. pp. 122-129.
(ISBN:978-963-334-258-9)