

# Final Dissertation



## Departing brains:

What measures has the Lithuanian government taken to address the issue of brain drain that affects the country since 2004 and what was the effectiveness of these measures?

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### Executive Summary

This dissertation was conducted at The Hague University of Applied Sciences in the programme of European Studies. The document analyses the current situation of brain drain in Lithuania. Lithuania is a small European country in the Baltic region with a rather small population that faces significant losses in its demographics due to emigration. Brain drain is a phenomenon when highly skilled and educated people leave their country and go abroad for various reasons. This is exactly what has been happening in Lithuania because among the leavers there was a significantly large amount of people who were not just unqualified workers. To explore the chosen topic of brain drain, a central question has been formulated: What measures has the Lithuanian government taken to address the issue of brain drain that affects the country since 2004 and what was the effectiveness of these measures? This dissertation will list and explore the measures of the Lithuanian government that were taken to solve brain drain. First, a look will be taken at the two educational reforms that were performed in the country. Such reforms had a purpose of modernising the Lithuanian educational system from the primary level until the university level and assure that the quality of teaching does not diminish. What is more, the reforms served a purpose of modernising the funding for scientific research and salaries for the academia for a reason to attract more scientists to stay and work in Lithuania. Then, to understand what other measures were taken to reduce emigration and brain drain in Lithuania, a look will be taken at the new subsidy system for real estate for young families establishing in Lithuania.

Currently brain drain and emigration are sensitive issues for countries like Lithuania because the rising number of leavers is a threat to Lithuania's small population. The 2004 accession to the European Union has accelerated the flows of people to the older member states because visa and work permits were no longer required. The research found that the measures taken by the Lithuanian government to solve brain drain and reduce emigration were not quite effective based on yearly increasing number of Lithuanian inhabitants leaving the country. The ineffectiveness to reduce brain drain and emigration comes from the government's incapability to prioritise education and bettering the salaries of Lithuanian labour which consequently decide to relocate to older European Union's member states where salaries are reasonable.

All in all, the research argues that even though the return migration and immigration in Lithuania are increasing, the net migration in the country is still quite high because the number of emigrants is not decreasing. Therefore, the research suggests that the measures of the Lithuanian government to address brain drain were not as effective as one anticipated.

Table of Contents	
Executive Summary .....	I
Introduction .....	1
Methodology .....	4
What is Brain Drain?.....	7
Causes of Brain Drain in Lithuania .....	9
Effects Caused by Emigration.....	13
Positive Economic Effects.....	13
Negative Economic Effects.....	14
Negative Social Effects .....	16
Positive Social Effects .....	17
First Attempt to Reform Education.....	20
Current Measures to Reduce Brain Drain by Reforming Education .....	23
Implemented Measures Foreseen in the Reform .....	24
<b>Primary and secondary education.</b> .....	24
<b>Vocational training schools</b> .....	25
<b>Universities.</b> .....	25
Third attempt: Financial Subsidy for Young Families .....	28
Discussion.....	30
Were the Targeted Goals to Tackle the Issue of Brain Drain Achieved? .....	32
Conclusion .....	36
Recommendations .....	39
References.....	41
Appendices .....	44
Appendix 1 .....	44
Appendix 2 .....	46
Appendix 3 .....	47
Appendix 4 .....	59

## Introduction

Brain drain is a consequence of migration and to be more precise it is a direct consequence of emigration. Migration is a term describing people's mobility from place to place and the explanation of migration can vary greatly. Migration can depict a movement of people who are relocating from rural areas to a city within the borders of one country. Moreover, migration can involve multiple states when people are crossing borders, and this type of migration then becomes an international migration. A country whose citizens are migrating from is called a sending country and its citizens who leave are called emigrants, while the same citizens who left their country and entered another country are called immigrants and the state they entered is called a receiving country. Among the people who emigrate from one country, there happen to be people who are qualified and possessing a higher education diploma (Merriam-Webster, 2018). This is where the problem of brain drain begins to be evident. According to Thomas Straubhaar (2000) brain drain is a phenomenon when educated and highly skilled people leave one country for another due to an economic situation where one can benefit more for instance for the same qualification job (pp. 10-11). Brain drain is an issue that needs to be tackled in the countries that face serious decreases in their population. Countries that face the issue of brain drain have overcome a rather hard transition in a political sense especially in Eastern Europe and have faced some troubling experiences to become fully functioning and balanced entities (Staubhaar, 2000, p. 11).

One of the countries that fall in the description mentioned above and that has faced a challenging environment to achieve a stable economy is Lithuania. Lithuania is one of the countries in the world whose citizens are leaving the country in high numbers and this fact can cause or already causes some serious troubles that need to be tackled promptly. For this dissertation, Lithuania was chosen to be researched about migration and specifically emigration and how the growing number of people emigrating had an impact on brain drain and which problems the country have had to encounter so far. One of the reasons for choosing this topic is to explore the current policies and measures that are being applied for solving brain drain in Lithuania. It is important to explore this topic because human capital is one of the most crucial parts in a healthy society especially in a country such as Lithuania. Lithuania is a small Baltic state that started losing its population in higher numbers in this century (Karpavičius, 2006).

Exploring the topic of brain drain will enable to raise awareness about this important issue. The brain drain effect can be compared with a domino effect, if there is no proper attention brought to the problem of brain drain, countries like Lithuania will result in losing its most talented people at a more rapid pace. Moreover, when people leave one country massively, it causes serious problems

in the country's demographics and economy. Demographic problems involve ageing population, low birth rate and decreasing population. Once a country faces the demographic problems, consequently another problem is felt in the country's economy because ageing and decreasing population cannot provide enough of labour for the labour market. It is very important to address the issue of brain drain and emigration because this phenomenon is closely related to the well-being of states. Therefore, the central question of this dissertation is "What measures has the Lithuanian government taken to address the issue of brain drain that affects the country since 2004 and what was the effectiveness of these measures?".

Among emigrants, there were many qualified workers, recent university graduates and many highly educated and professionally skilled people who could have stayed in the country and contribute to Lithuania's prosperity. Nevertheless, instead of staying in Lithuania, people saw many other possibilities to make their lives better abroad. However, many opportunities like the 2004 accession to the European Union led those people to abandon their lives in Lithuania and seek for other opportunities abroad.

One of the reasons why numbers of people leaving Lithuania were increasing monthly was Lithuania's economy that still had to catch up after years of Soviet oppressions. Shortly after the country received its independence back, much had to be established, changed and transformed. This rather politically young country that joined the European Union in 2004 received many benefits that helped the country to recover and be a part of Europe again, however it all came with a price, namely, mass emigration. The mass emigration did not begin because Lithuania joined the EU, nevertheless, the accession to the EU gave people an opportunity to go visa free to other EU member states to seek better paid jobs. The membership in the EU repealed work permits and the citizens of the new EU member states could work without a permit and establish in other European countries easier than it was before. However, intense and rapid migration of Lithuanians started when the worldwide crisis hit the continent. As Mihails Hazans and Kaia Philips listed, the receiving states which Lithuanians targeted to relocate were mostly Ireland and the United Kingdom because of their thriving economies and the English language (Hazans & Kaia, 2011).

This dissertation will have a focus on the issue of brain drain in Lithuania by looking at current policies that exist in the country. The policies will be evaluated, and their functionality will be discussed. Following paragraphs will constitute of methodology in which the methods used for this dissertation will be described. The main body will consist of several chapters which will help in answering the sub-questions that were purposely designed for this research paper. The sub-questions will cover the origins of brain drain and its economic and social effects. Moreover, a look

will be taken at the policies which were enacted by the Lithuanian government to combat brain drain and furtherly whether the initiated goals to deal with brain drain were achieved. Lastly, to get an even closer approach about brain drain in Lithuania, a closer look will be taken at one of the measures taken by the Lithuanian government to tackle brain drain i.e. the recent educational reform. The educational reform in Lithuania will be investigated because it is an important measure that the Lithuanian government is attempting to implement to solve the issue of brain drain. It will be looked at how this reform is contributing to the reduction of brain drain for example by downsizing the current number of universities and university programmes that are very similar in the Lithuanian universities.

## Methodology

To answer and find a solution to the main research question, the research explored plentiful different sources. This research enabled to collect valuable data about the issue of brain drain in Lithuania and facts from articles, academic journals, historical papers and books on the topic, its historical beginning and reasons why the issue is still an ongoing problem. These findings contributed to this dissertation by providing the information that is needed. All the sources that were used for this paper apart from the ones used to describe the phenomenon of brain drain and the term emigration were issued after 2004 mainly because this dissertation has a purpose to focus on the emigration flows and the brain drain that has been happening after the accession to the European Union. This implies that brain drain was somewhat influenced or at least accelerated because of the open borders in the union.

Since this dissertation has a focus on brain drain occurrence in Lithuania from 2004, when the country joined the European Union, the research has also set a limit until which date the information concerning this dissertation should be collected. This means that the dissertation focused on the events and available information about brain drain in Lithuania from 2004 till August 2018 and the changes within certain reforms after the month of August are not included in this paper. However, this researched encountered and used sources prior to 2004, for example, to define terms like brain drain or to extract governmental information about the changes in Lithuanian population before and after the accession to the European Union. Moreover, the most recent and updated institutional data from the Lithuanian governmental websites such as the Yearbooks of Lithuania published by the Department of Lithuanian Statistics were released in August and included the data till August 2018. However, concerning the information on EU statistics, the newest source was created in October 2018 by EUROSTAT and was therefore used because of its relevance for this research to compare certain economic performances between Lithuania and the EU average.

The conducted desk research contributed to answering the sub-questions which were purposely made to help to answer the central question. Desk research enabled this dissertation to collect various data that was needed to observe the trends of the changing Lithuanian population. The primary data provided by the Department of Lithuanian Statistics gave exact numbers of population that live in the country, it also provided data about emigration and immigration, unemployment rates during certain years and much more that was related to this research. The data was briefly explained and put in many tables in the statistical yearbooks that were published yearly. However, only the yearbooks from the years of 2007 and 2018 were used because the data shortly after the accession to the European Union and the most recent data from the past three years was relevant

for this research. Moreover, only the relevant information that could contribute to the main topic of brain drain from these yearbooks was used. The collected data from the Department of Lithuanian Statistics was available both in Lithuanian and in English languages.

Furthermore, an ample amount of institutional data about brain drain was collected as well. This type of data was accessed through the official websites of the Lithuanian government and ministries. The crucial information provider was the Lithuanian Ministry of Education and Science. The information that was provided by the Ministry was only in Lithuanian, however, this was not an issue since the author of this dissertation is a native Lithuanian speaker which led to access this information without any language related troubles. The information by the Ministry of Education and Science was used to find information about the educational reform that is currently being performed in Lithuania. The reform has a purpose to stop the issue of drain brain. Since the reform is yet ongoing, there was little information on how it is being implemented, although the measures to overcome the problem of brain drain and concrete steps on each educational level were detailly explained.

The focus of this dissertation is aimed at the educational reforms that were performed by the Ministry of Education and Science of Lithuania. The Ministry is one of the central powers that combats with the issue of brain drain by introducing and implementing various strategies and reforms. Therefore, the Ministry is of great interest for this dissertation to explore the mentioned strategies and reforms because these are the most significant measures in addressing brain drain.

This dissertation did not face many problems related to the lack of information on certain topics. There was a great amount of information that was available to use about the seriousness of brain drain for Lithuania, the emigration from Lithuania in general and as well as the information about the receiving states. Especially, there was a lot of secondary data on topics such as the migration flows to the United Kingdom and Ireland since the two were the most popular destinations for the Lithuanian migrants in the post-enlargement period. The information on this topic was retrieved from a discussion paper published by the Institute for the Study of Labour in Bonn.

Moreover, a few publications were found on the economic performance of Lithuania. Such publications were published by OECD and Centre for European Reform in Denmark which also identified some problems related to brain drain and migration of the Lithuanian workers to the Western European countries. What is more, a few sources were journalistic as well. Lithuanian news websites and some online journals talked about the issue of brain drain and its most recent changes. These journalistic sources gave an insight on recent information about brain drain.



Nonetheless, EUROSTAT, a primary source was also a tool to access information about the data on European relevance such as the unemployment rates within the EU.

Furthermore, to produce primary data an interview was conducted to gain valuable data on certain topics such as the performance of the Ministry of Education and Science of Lithuania during the implementation period of the educational reform. As it was agreed upon with the interviewee, the confidentiality of the interviewee will be respected, therefore the interviewee will be referred by using a pseudonym 'Mr Jonas'. One of the reasons to keep the interviewee's identification in secret is to protect the organisation that the interviewee works. The interview touched upon certain politically sensitive topics including criticism to the Lithuanian government, therefore it was a convenient step for the interviewee to become anonymous. The organisation of Mr Jonas is an institution that is closely related to education and any changes within the Lithuanian educational system would have an impact on it, for instance, the customers it serves and for the services it provides.

Lastly, the Ministry of Education and Science which is a very important figure in this dissertation was contacted for an interview as well. The Ministry, however, has only exchanged information through email, nevertheless, the information from the Ministry was used as a primary source for this dissertation. The information was provided by Genovaitė Bingelienė who is the Senior Specialist at the Department of Communications of the Ministry of Education and Science. Ms Bingelienė has provided information and updates about the current educational reform and how the Lithuanian government and the Ministry of Education and Science are working to reduce brain drain and emigration in Lithuania.

### What is Brain Drain?

Brain drain is a term used to describe a more specific type of migration. To be more precise, it is emigration that encompasses brain drain. While emigration depicts a physical relocation of one person despite one's occupation, brain drain can be explained as a wide range factor that encompasses highly educated people possessing university degrees by leaving their home country for another. One of the main reasons for such migration could be better socio-economic conditions in receiving countries. The term brain drain was first used in around 1970s in the United Kingdom when there was a need to describe highly educated scientists and medical professors leaving the United Kingdom for the United States. The term was further used in the following years and its use was expanded to describing highly skilled workers possessing various valuable qualifications and their migration from less developed countries to more developed countries (Olsen, 2003, p. 114).

Brain drain can be triggered by three factors which are individual, organisational and those influenced by a state. Zehava Rosenblatt and Zachary Sheaffer (2001) wrote about the first factor, namely, how an individual himself can be a cause and a reason for the occurrence of brain drain. Individual factors such as one's educational background, competences and even age are elements of the individual factors which motivate the occurrence of brain drain. One's educational background and the quality of it can be very useful for employers and the state, however, once the person whose educational background is rather strong leaves the organisation, the organisation faces a big loss and so does the state if the person relocates himself abroad. It is believed that the educational background has an impact on person's future development and motivation to acquire more skills and qualifications which would rather contribute to country's prosperity if one does not decide to leave (Rosenblatt & Sheaffer, 2001, p. 415). Moreover, Z. Rosenblatt and Z. Sheaffer stress the importance of one's competencies which can directly influence brain drain. In case of any instability at a firm that is caused by external factors such as the economic or political situation in the country, highly competent personnel are first to react. This reaction could mean that the personnel will be first to look for another workplace which could be anywhere, including foreign countries and consequently this results into brain drain (Rosenblatt & Sheaffer, 2001, p. 413). As the instability due to external factors was mentioned before, not only the highly competent staff but also younger employees of an organisation may leave. Young age is favourable when it comes to finding a job in different surroundings such as foreign countries, while it is relatively harder to do the same for older people. Young people are not bound to retirement benefits or any other financial aids that would drastically influence one's life, while on the other hand people who have families carry the responsibility to provide for their families (Rosenblatt & Sheaffer, 2001, p. 415).

Furthermore, organisational factor is another trigger that motivates brain drain. Low pay, lack of proper attention from one's boss or unattractive working environment for the younger generation are also elements that can influence brain drain. According to a psychologist Kostas Zalatoris from "Personnel's Academy" it is the nature of people to always look for something better. Mr Zalatoris stresses that Lithuanian employees are dissatisfied with low pay at many companies, therefore the employers should consider the raise of their employees' salaries unless they will look for better opportunities abroad, which directly results in brain drain (Panevėžio Balsas, 2017). What is more, the working atmosphere and the relationship between an employee and an employer in Lithuania is seen to be very distant and sometimes too hierarchical. Such distant relationship as Mr Zalatoris says impacts employees' overall performance and, in the end, motivates one to leave the workplace and look for another job in the countries where the relationship between an employee and an employer is friendlier and less distant (Panevėžio Balsas, 2017). Lastly, the modernisation of a workplace is very important to maintain a healthy working environment. If a company wants to attract the younger generation it is also expected from the company to modernise the working environment, establishing better IT facilities, and improving the communication between the staff and management. These tools are needed to maintain companies vivid and youthful flow unless it would be hard to function without having a young staff which has a lot to offer with its up to date knowledge and recently obtained skills (Panevėžio Balsas, 2017).

The third factor that has a significant effect on the issue of brain drain is seen to be impacted by a state. The incapability of states to provide jobs for highly educated people can strike these countries negatively. As Alexander Hellemans (2001) states, Italy experienced a huge brain drain at the beginning of this century simply because of the state's incapability to provide workplaces to young professors and scientists. The only way to get a position and to become a scientist at the Italian universities was to have connections with the older professors and help them by being their assistants. This led young scientists to emigrate to other countries. The receiving states provided the newcomers with a full experience of being scientists at their field of expertise without having to be somebody's assistant for several years (Hellemans, 2001).

### Causes of Brain Drain in Lithuania

To begin with, brain drain is a consequence of emigration and in this case, emigration in Lithuania is present due to poorer economic performance. The economic performance can have an impact on the government's budget, spending and financing various projects within one country. One of the most prevalent ideas why the brain drain and emigration, in general, were increasing in Lithuania was the country's inability to support the scientific sector. According to Romualdas Kalytis (2004), from the Lithuanian Ministry of Education and Science, the stimulus of highly educated people leaving Lithuania was the government's incapability to prioritise education. He argues that science in Lithuania is not getting enough funding which would contribute to bettering the conditions of various scientific researches and the performance of scientists. In the year of 2004, when Lithuania joined the EU, the funding for scientific research decreased while at the EU level the funding for scientific purposes was a priority to improve the conditions of research, which in result awarded the society's well-being (Kalytis, 2004, p. 17). A poor financing system for science sector results in scientists, teachers and professors earning uncompetitive and rather low salaries and in addition to that, scientists do not have an up to date equipment to work with. Such conditions as being underpaid and working with older equipment can indeed impact one's decision to emigrate and look for better opportunities abroad.

However, personal communication with Genovaitė Bingelienė from the Ministry of Education and Science of Lithuania showed that the financing for scientific research saw a growth of 8.5% from 2014 to 2017. After many years of having trouble to properly appoint appropriate attention for scientific research including proper financing for the equipment and salaries for scientific workers, the Ministry has initiated a change which is currently being performed. Moreover, the official data provided by the Ministry states that in 2019 the growth for scientific research and related fields such as salaries and equipment will reach 18.5% (Bingelienė, personal communication, December, 2018).

It shall come as no surprise that migration from Lithuania was happening since Lithuania became an independent state in the 1990s. Factors listed by Ms Thaut such as transitioning to market economy and privatisation contributed to the numbers of people deciding to relocate to another country (Thaut, 2009). However, increasing numbers of people leaving the country started being a threat to Lithuania once joining the European Union and the Schengen Area Agreement gave easy access to establish in another EU and EEA member state. Since this research paper is focusing on the migration trends from the accession to the EU, only the history of migration and brain drain happening since 2004 will be further addressed and analysed. It is indeed a fact, that accession to the EU influenced the large numbers of people to relocate because of the opportunities and easier

mobility. Few years after the accession to the EU, Lithuanian diaspora was soon one of the largest minority groups in Ireland and the UK (Hazans & Kaia, 2011, p. 8).

The figure below provides a visual presentation about the changing numbers in Lithuania's emigration, immigration and net migration. The figure includes data from the year of 2001 till 2003 the years prior to the accession to the European Union and data from 2004 to 2006 the years after Lithuania has joined the European Union. It is noticeable that in the year of 2001 and 2002 net migration in Lithuania was already negative however still rather low. In 2003, one year before joining the European Union, the net migration tripled while in 2004 when Lithuania was an official member of the EU, emigration from the country increased meaning that the net migration in Lithuania increased by a third compared with 2003. After one year of the EU membership, the net migration lowered because the immigration to Lithuania increased, however, the number of emigrants increased anyhow. In 2006 emigration from Lithuania started decreasing while immigration saw an increase, resulting in the net migration to shrink by almost a half comparing to the previous year.

### Migration prior and post EU accession in Lithuania 2001-2006

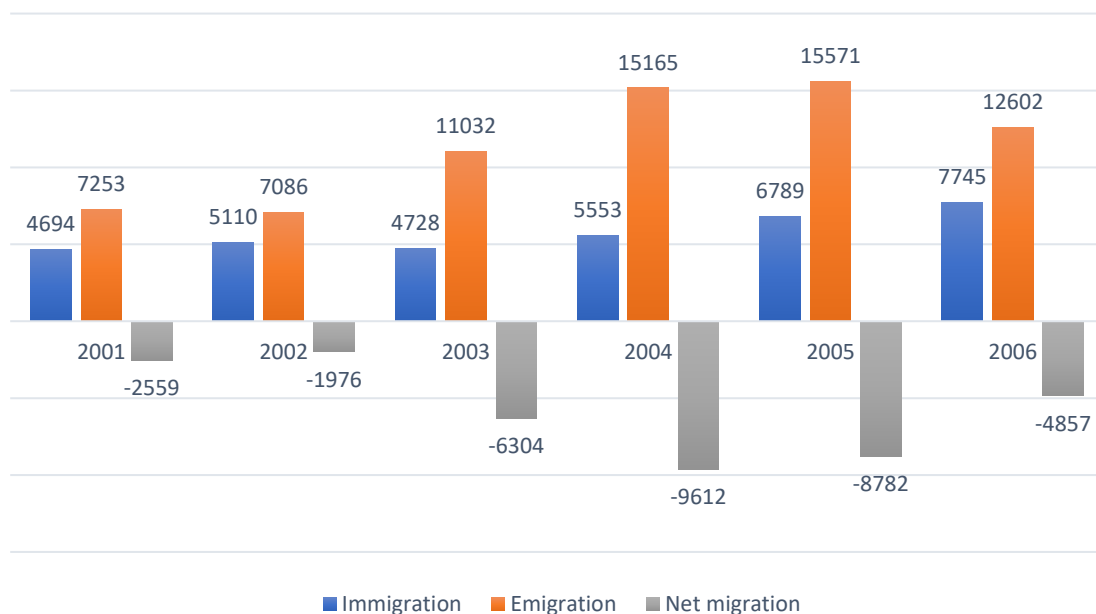
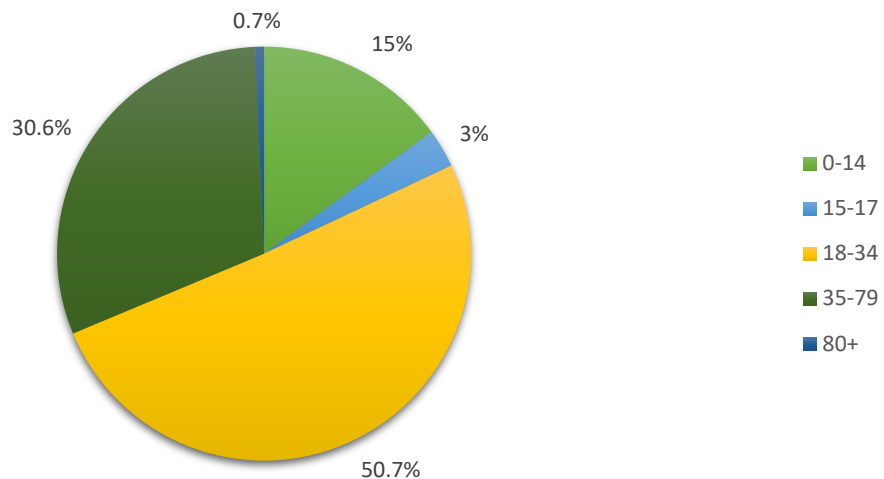


Figure 1. Compiled from: (Statistics Lithuania, 2007)

When the net migration in 2004 and 2005 increased greatly, already in 2006, the major group of people leaving Lithuania was aged between 18 and 34 and this indicates that the number of this group of people is significantly larger than before the accession to the EU. To have a clearer understanding, *Figure 2* below visualises five different age groups of people who emigrated from Lithuania in 2006.

**Percentage of emigrant groups in 2006 by age**



*Figure 2.* Compiled from: (Statistics Lithuania, 2007)

The main factor is very well-known and that is job mobility (Barysch, 2006, p. 17). The accession to the EU granted and opened many more labour markets where Lithuanians could familiarise themselves and establish for better paid positions. Every year, the migration from Lithuania is raising and the numbers of people leaving the country are not decreasing. Moreover, the number of people immigrating to Lithuania is rather small, and therefore these numbers do not have any major impact. Looking at the recent migration trends, the migration from Lithuania is increasing. According to the Department of Lithuanian Statistics, there were 18 980, 23 241 and 21 557 people in 2015, 2016 and 2017 respectively who emigrated from Lithuania to the United Kingdom (Statistics Lithuania, 2018).

Furthermore, the factors that influenced rapid emigration from Lithuania are associated with the economic situation in the country. The second reason for increasing emigration was the significant wage difference between Lithuania and the old European Union member states. Such a difference had a negative impact on people's perception of how much one should earn. Indeed, people in Lithuania expressed their dissatisfaction about wages being inadequate to accomplish their needs because the prices in the country were unreasonably high for such low pay and hence the emigration (Alfa.It, 2017). The data provided by the Lithuanian Statistics (2007) indicate that the

minimum wage in Lithuania in 2007 was eight times smaller than in Luxembourg, seven times smaller than in Ireland and the United Kingdom and only three times smaller than in Spain (Statistics Lithuania, 2007, p. 41). It was rather difficult to live with such small salaries in the country knowing that people in other countries can earn at least three times more. Once people started noticing that it is rather hard to sustain themselves in such an economic environment where one earns so little that it is hard to provide for themselves and for their families, the thoughts of emigration started arising. Although, recent years showed great economic progress in the country. The Lithuanian economy especially after the 2008 economic crisis recovered at the rapid pace while being the fastest recovering economy in Europe. However, even then the rapidly recovering economy and the economic situation becoming better than it was, the number of people leaving the country was not decreasing despite increasing salaries.

The third reason why people were constantly leaving was their purchasing power. The prices were increasing and it is a normal factor that should happen in the economy that is now rather stable, however at the same time people were still dissatisfied due to the fact that salaries in the old EU member states were still drastically higher and in some cases reaching the difference of seven times (Kowalczyk, 2017). The fact that the prices were not adjusted to people's earnings, many employees were left to feel unappreciated because of the low salary, therefore, emigration was the solution to their problems. As a report by Rasa Daugėlienė and Rita Marcinkevičienė (2009) suggests, emigration seemed to have improved people's emotional satisfaction due to higher pay for the same qualification job which boosted workers' overall performance as well (p. 19).

To sum up, the research shows that brain drain and emigration are caused by many factors, however, all the factors are mostly related to Lithuania's economic situation. This dissertation argues that brain drain in Lithuania was powered by the low financial support from the Lithuanian government for the scientific sector and low salaries for academia. Moreover, another factor that powered emigration was the 2004 accession to the European Union, when it became easier to relocate, find a job and establish in the other EU member states without any permits. While the emigration prior the accession was rather low, in 2003 the emigration rate tripled and for another two years it stayed high and only in 2006 emigration decreased, however, it was still two and a half times bigger than before Lithuania's membership in the European Union. It was found out that largest emigrant groups were people aged 18-34 and they were the most economically active people, however, the low pay in Lithuania has impacted those people to emigrate to countries such as Ireland and the United Kingdom.

## Effects Caused by Emigration

### Positive Economic Effects

There are various effects that were caused by emigration and one of them can be considered positive. The most noticeable pattern of large numbers of people leaving one country is the reduction of the unemployment rate. The data about the unemployment rate is provided by the Department of Lithuanian Statistics, which describes the unemployment as a short-term factor when one is seeking for a place to work, however, it is rather hard to become employed. The chart below visualises data about the unemployment rate in Lithuania from 2005, one year after the accession to the EU, among people aged 15-64. The unemployment rate was 8.3% of the total population in 2005 while in 2010 however, the unemployment rate increased to 17.8%. The years after 2010 faced a decrease in the unemployment rate and this can be linked to the increasing emigration of Lithuanians to other EU member states.

### Unemployment rate among people aged 15-64 in Lithuania

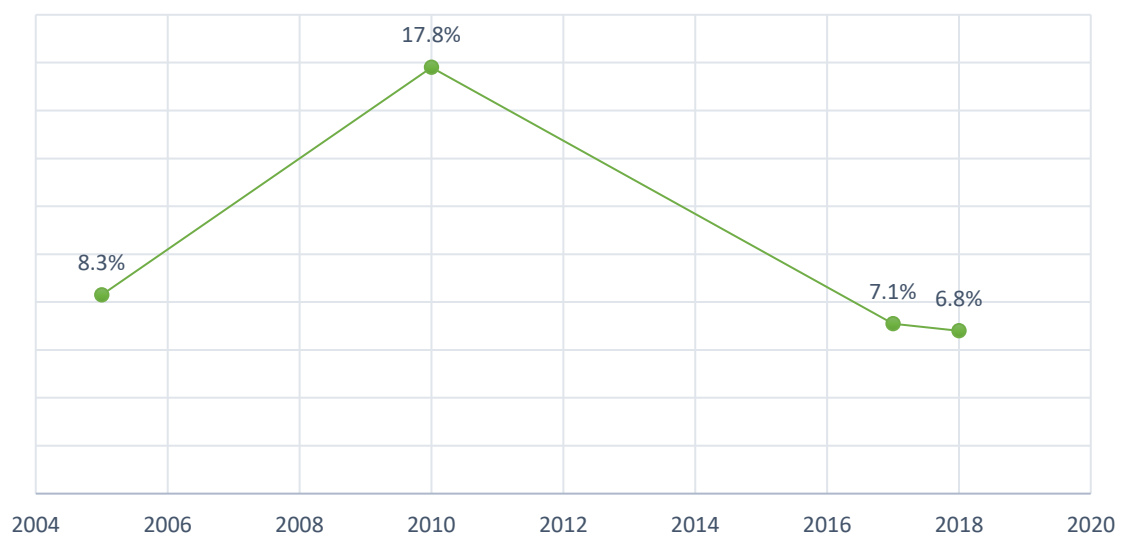


Figure 3. Compiled from: (Statistics Lithuania, 2018)

People in Lithuania did not see many opportunities to live in a country due to thousands of people being fired and resulting in a significant demand for a job. However, it was not an easy task to accomplish and provide jobs for unemployed, therefore the unemployment rate was very high. The year 2010 was a breaking point of mass migration when thousands of people left Lithuania. Therefore, from 2010 onwards the rate of unemployment was decreasing significantly and in seven years the number of people not being employed reached 7.1% in 2017 (Statistics Lithuania, 2018). For the comparison, the average unemployment rate in the EU this August was 6.8% while in Lithuania 6.2% (EUROSTAT, 2018).



Moreover, to go more in depth, a trend of unemployment can be distinguished between three different categories of people possessing different qualifications. The Department of Lithuanian Statistics provides data on how many people are unemployed and of which have a diploma in tertiary education or secondary education and people who have only completed a general lower secondary education. The number of unemployed people possessing a tertiary education diploma was registered at 7.6% in 2010, just before the mass migration from Lithuania. People who only completed secondary education reached 21.8% of unemployment, while the last category of people who possessed a qualification of a lower secondary education reached 39.3% of unemployment. The tendency from 2010 of the unemployment rate decreasing is also noticeable in this category. In 2017, the unemployment rate among people with a university degree decreased by almost 2/3 to 2.9%, the number of people with a secondary school education have dropped by twice and reached 9.3% while at the same time the unemployment among people with general lower secondary education has also decreased by half and was 20.4% in 2017 (Statistics Lithuania, 2018).

It can be concluded that flows of emigration from Lithuania have had a positive effect which manifested in the decrease of unemployment. The unemployment rate in 2005 was at 8.3% while the unemployment rate in 2010 saw a major increase and reached 17.8%. The research argues that emigration from Lithuania had a positive effect on the unemployment rate because during the period of mass migration unemployment decreased significantly and in 2017 it was 7.1%. It was also seen that people with different educational backgrounds have had a great reduction in unemployment and the number among highly educated people being unemployed barely reached 3%.

#### Negative Economic Effects

As it was covered above, emigration does not necessarily have to be a negative occurrence, although, in the example of Lithuania, the fact that many people are leaving the country is not favourable because of its small population. The negative effects of emigration can be listed as a lack of labour and of course brain drain. It is important to know that the qualified labour market was also facing increasing unemployment. The qualified labour market is identified with people who obtained higher than the secondary school education or the maturity diploma which is an equivalent to A-levels in Lithuania. Furthermore, the constant emigration from the country reduced the number of economically active people and at the same time increased the number of economically inactive, meaning that the shrinking group of economically active citizens must have sustained the inactive ones economically, for instance, by paying more taxes. This specific example

is exactly what has been happening in Lithuania so far since 2010 when large quantities of people started leaving the country. Especially in the year of 2010, 77 944 was the number of how many people Lithuania has lost due to emigration. Moreover, according to Rasa Rudžinskienė and Lina Paulauskaitė (2014) Lithuania experienced an increase in disparities among regional development due to emigration, meaning that some regions of the country faced stagnation or an extremely slow growth, mostly rural areas from which people emigrated to the Lithuanian cities or other countries, while other regions including the bigger cities of Lithuania experienced economic growth due to immigration from the rural areas (p. 68).

What is more, another negative economic effect that is caused by emigration are the lost taxes which were not collected from the people who left. People who left Lithuania were mostly aged between 20-64 meaning that those people were economically active. These people would have been able to receive an average salary which would have been taxed by the income tax of 15%. The Lithuanian state could have prospered by around 28 million euros every year from 2009 until 2012 if the emigrants would have stayed in the country (Rudžinskienė & Paulauskaitė, 2014). Besides losing the tax money from people who decided not to live and work in Lithuania but rather emigrate, Lithuania faced an even more serious problem and that was lost investments. Every person who left Lithuania possessed some type of education which by the way can reach around 50 000 euros spent for one person by the Lithuanian state. On average the Lithuanian state invests 33 000 euros in one person for a 12-year study. If the person decides to proceed in achieving a university degree, the expenditures made by the Lithuanian state reach roughly 50 000 euros.

According to the calculations made by the Lithuanian financial professional Rokas Lukošius, Lithuania 'wasted' around 27.4 billion euros on providing education to people who after their studies left the country and contributed to the receiving countries with their knowledge and labour (Lukošius, 2018). Nevertheless, the total emigration from Lithuania had a negative outcome which resulted in growing disparities between the Lithuanian regions and prevented the Lithuanian state from collecting more taxes which could have been invested for example in the country's infrastructure or in many other ways where there is a need to be improved. Not to forget, the state's investments in its citizens was neglected by the occurring emigration which cost a lot of money which again could have been invested in other ways.

In short, emigration from Lithuania resulted in labour shortage in many fields. The staying population faced a bargain of paying more taxes because the percentage of economically inactive people in Lithuania was increasing. Moreover, brain drain was a huge disadvantage for Lithuania since the country has lost large amounts of tax money from the people who left the country and as well all the invested money that Lithuania spent on its human capital. The decreasing population

has also had an impact on the increasing economic disparities between Lithuanian cities and the regions.

#### Negative Social Effects

Demographic problems are seen to be the most occurring when it comes to the mass emigration. First, since 2010 there was a huge decrease in the overall population of Lithuania. According to data from the Department of Lithuanian Statistics as of 2010, there were 3 million 142 thousand people living in Lithuania. The year after, when the mass migration began, the population decreased by 2.9% and by 2017 the total population of Lithuania decreased by another 9.4% (Statistics Lithuania, 2018). Figure 4 reflects the changing Lithuanian population from the year of 2010 until 2017 when the last calculation of the Lithuanian population living in Lithuania was performed.

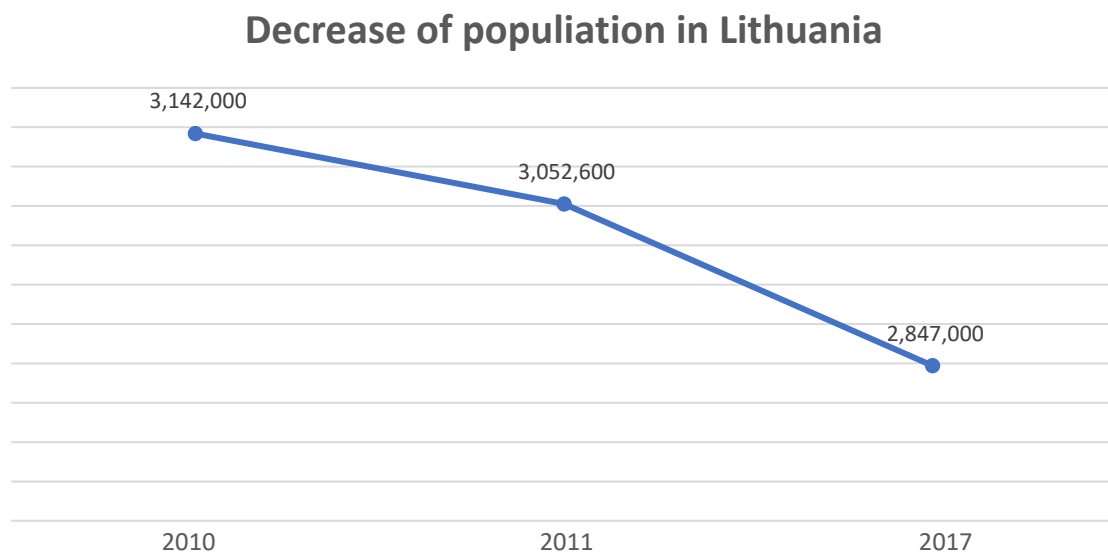


Figure 4. Compiled from: (Statistics Lithuania, 2018)

The more and more diminishing number of the Lithuanian population was potentially to cause many more problems related to demographics. The ratio of elderly people was increasing as young and economically active people were leaving, while the lessening of marriages was also a factor that was caused by emigration and played a huge role in an overall decrease of the birth rate. Moreover, emigration was a reason for the raising number of divorces between married couples and an increasing number of children being placed in child care homes. According to OECD report for Lithuania (2015) by Audra Sipavičienė ever since 2007 the number of children being taken to foster home increased every year until 2014 (p. 17) and has grown by 145.3%. Emigration had a huge impact on Lithuanian families, some of them left the country for good, although many of them did not decide to relocate all together and sometimes only one member of the family would

emigrate and that influenced the decision of many couples to divorce. Moreover, parents' incapability to take care of their children while going abroad led to a fact that many children were abandoned and had to be taken away by the child care institutions. Another issue that is related to emigration is that the families which managed to relocate successfully all together without breaking their families apart is a threat that is resulting in a higher chance of those families not returning to Lithuania and staying abroad indefinitely. This is because many families which relocate with all their core family members are most likely to establish at the host country and stay there for a long time rather than those who leave some members of their core family in Lithuania. Emigration is a threat to the social well-being of many countries whose citizens having families decide to relocate to another country. According to OECD report (2015) by Audra Sipavičienė, it was seen that emigration impacted the decrease of the total Lithuanian population, it increased the number of divorces and the number of children living at the foster care (Sipavičienė, 2015).

In conclusion, emigration in Lithuania has also changed the Lithuanian demographics. The increasing number of people leaving Lithuania has resulted in Lithuania losing around 10% of its population. In addition to that, among the leavers, there were more than half who were aged between 18-34 meaning that the Lithuanian population was also rapidly aging. The large quantities of people emigrating impacted the increasing divorce rate and children staying at the foster care.

#### Positive Social Effects

Now that it is known that emigration provides one country with many negative social aspects, it is not a surprise that emigration from one country can also bring benefits. Besides emigration that has been occurring in Lithuania for many years, immigration has also increased in the country to a certain extent. The data provided by the Department of Lithuanian Statistics on immigration shows that immigration has been increasing. Among those who immigrated to Lithuania, the majority of them accounted of emigrants who left Lithuania before. In 2015, roughly 22 000 people entered Lithuania and among those people, 18 000 of them were Lithuanians who have left the country before and came back after a short-term emigration. The Department of Lithuanian Statistics uses the term remigration to indicate the process of previously emigrated people who come back to their country of origin.

The figure below adduces the occurrence of remigration in Lithuania from the year of 2015 until 2017. By looking at the chart the biggest group of people who immigrated to Lithuania consisted of previously emigrated Lithuanians. The following years after 2015 have faced a decreasing number of Lithuanians who were immigrating to Lithuania and in 2017 only half of the total number of immigrants consisted of Lithuanians.

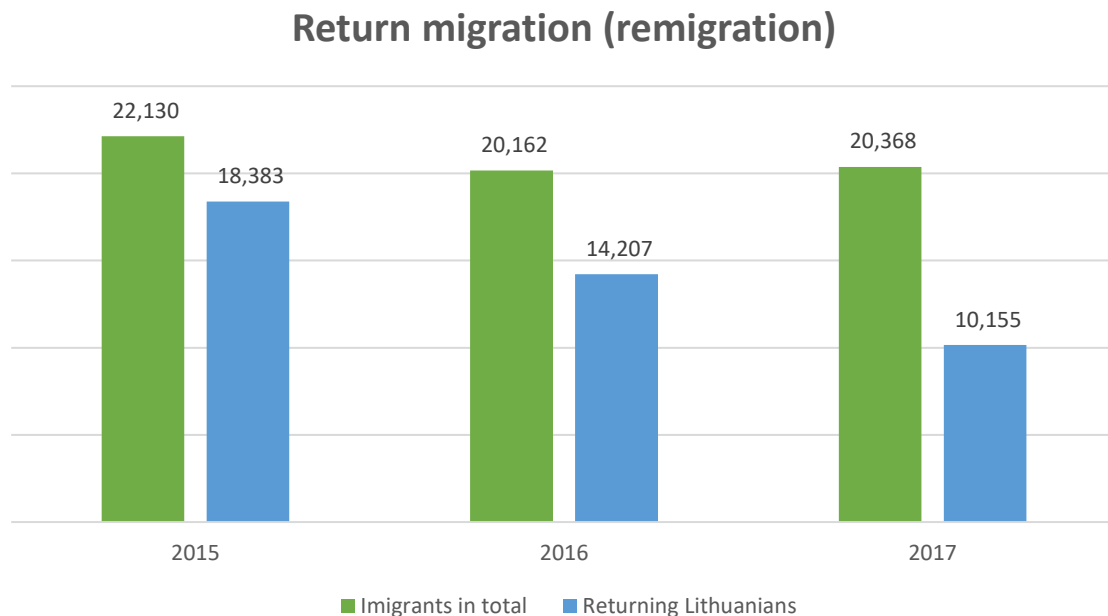


Figure 5. Compiled from: (Statistics Lithuania, 2018)

People who are returning to Lithuania can bring new experiences and/or qualifications from other countries. Many people who left Lithuania had not only reasons of just getting a job or earning money but also a part of them went for a reason to qualify, develop and obtain a degree abroad. Those who decide to come back are a great example of how the country could exploit these people positively. Such new experiences that were obtained by people abroad, contribute to the labour shortage with their newly gained knowledge. What is more, the increasing numbers of people leaving Lithuania can also be an indirect chance of promoting the country and its culture. The growing Lithuanian diaspora abroad is establishing Lithuanian centres where the local Lithuanian communities partake in various gatherings, events etc. This way these communities can spread the word about their country, traditions, language and their culture. The growing diaspora can be an advertisement for Lithuania whose activities are attracting more attention to it. Opportunities to expand the tourism sector and attract more direct foreign investments are results of the active Lithuanian diaspora abroad and its enthusiasm to share a good word about Lithuania to their neighbours.

The positive social effect of emigration in the case of Lithuania have resulted in the increasing immigration rate, however, it was found out that among the immigrating people most of them, especially in 2015, were Lithuanians who were returning to the country. Among the people who returned to Lithuania, there were people who have obtained various skills, have studied at foreign universities and brought their new knowledge to Lithuania. Moreover, people living in emigration have also contributed to spreading a good word for their country. Lithuanians living abroad were the ones to promote their country for the local people of the host country meaning that more people were being made aware of such a country like Lithuania and such promotion of the country could lead to increasing tourism. In addition to that, by promoting Lithuania, the country may become more attractive for many foreign businesses and various new firms could start operating in Lithuania.

### First Attempt to Reform Education

This research has already explored the causes of brain drain and emigration and in addition to that their causes to the Lithuanian economy and social environment. To proceed with a further analysis of the brain drain in Lithuania, this paper will look at the attempts of the Lithuanian government to tackle the issue of brain drain. This dissertation indicates that the first attempt of solving brain drain in Lithuania is the first educational reform that was performed from 2003 because brain drain is one of the factors that is powered by Lithuania's educational system. Multiple reforms in the educational sector have been performed shortly after Lithuania gained its independence back in the 1990s. The first reform that was implemented was in fact in 1992 when numerous measures had to be introduced because back then the current educational system was the one used in the Soviet Union (Izokaitis, Naginevičiūtė, & Kondratavičiūtė, 2008, p. 3). Since this research paper is focusing on the issue of brain drain in Lithuania from 2004, only the relevant reforms such as the mentioned one that started in 2003 will be discussed. The Lithuanian government issued a strategy for the improvement of its national education whose timeframe was 2003-2012. During these years a lot of changes were planned, however, the reform did not go as well as anticipated. Even though the reform was created by the Lithuanian government, a lot of freedom and interpretations were vested to the municipalities of the country. Many municipalities failed to implement proposed changes because of inefficient communication between them and the Lithuanian Ministry of Education and Science. Another factor that played a role in unsuccessful implementation was the poor budget that was appointed for the reform. When the interviewee Ms Bingelienė was asked whether all the goals of the strategy were achieved, she stated that indeed not everything was fully implemented. She suggested that the monitoring system of education at the beginning of the 2000s was not well developed therefore all the new changes from the reform were harder to implement and to predict their impact on future education (Bingelienė, personal communication, December, 2018). The State Control of the Republic of Lithuania in its published report indicated that in order to achieve what was planned, a better funding system and more investments from external sources had to be present during the period of the reform (Izokaitis, Naginevičiūtė, & Kondratavičiūtė, 2008, p. 4).

Furthermore, one of the most crucial elements of the educational reform of 2003-2012 that was left out was the structural reform of education. The structural reform was meant to change the number of universities in Lithuania because the country had too many of them. The number of universities was too high comparing it with rather little Lithuanian population. A large amount of universities had worsened the quality of teaching, many programmes within universities were

similar and therefore the reduction had to be implemented. However, as it was mentioned before, the structural reform was not implemented and therefore it had consequences later.

Among the successfully implemented changes in Lithuanian educational system, some highlights of this reform included free pre-school education for pupils aged three or older who come from families that are rather poor. Moreover, a year of pre-school in the kindergarten was made possible and compulsory which would lead pupils to later attend primary and secondary schools. Based on the calculations by the Lithuanian government, this reform gave access to 95% of Lithuanian children to be educated and led 60% or more of them to enrol at the vocational training schools or university programmes. Nevertheless, the reform lasted for 9 years, and in those years the funding of this reform was neither prioritised by the Lithuanian government nor the Ministry of Education and Science. To visualise how the funding changed during the period of the reform, Figure 6 indicates the decrease of school voucher that is appointed for one student per year in the year of 2012 with a comparison to the year of 2006. For better understanding, the data is converted to euro by the author of this thesis at the official rate provided by the European Central Bank where 1 euro equals 3.4528 Litas since Lithuania was not yet a member of the eurozone in 2012, therefore the numbers from the report of the State Control of the Republic of Lithuania are in Litas (European Central Bank, n.d.). Education was not a priority to the Lithuanian government, therefore, a reduction of funding was present. The funding for vocational training schools despite the economic situation becoming better in the country nevertheless, saw a major decrease.

### Comparison of school voucher for a single student in the years of 2006 and 2012



Figure 6. Compiled from: (VALSTYBINIO AUDITO ATASKAITA ŠVIETIMO SISTEMOS REFORMA, 2008)



To summarize, as this dissertation argues, the first attempt to stop brain drain in Lithuania by reforming its educational system did not seem to have a significant impact on brain drain. The reform has failed to implement one of the most important changes needed for the educational system to stop the brain drain in the country. It was found out that the Ministry has faced many obstacles that limited their performance and such obstacles were related to the financial crisis due to expenditures needed for the reform have been cut. Another obstacle was the inner communication between municipalities and the Ministry meaning that multiple parties involved in the reform failed to cooperate for reaching their common goal.

### Current Measures to Reduce Brain Drain by Reforming Education

Every year there are more universities that fail to attract the needed number of students to their study programmes, meaning that universities are becoming emptier. The fact that the enrolment of students to Lithuanian universities is decreasing influences many programmes to be closed. Furtherly, this also affects many professors losing their jobs or a reduction in their teaching hours which consequentially affects their salaries being cut. Therefore, something had to be done to prevent the decreasing number of students who are not choosing to study in Lithuania which in long-term may and will result in Lithuania losing its future specialists and scientists. The Lithuanian Ministry of Education and Science proposed a reform that has meant to change the country's educational system not only at the higher educational level but also at the level of secondary and primary education and in addition to that at the level of vocational training as well (Ministry of Education and Science, 2018). This section will focus on the reform that was proposed to be implemented by the Ministry of Education and Science in Lithuania where the key points of the reform itself will be presented and further evaluated. Moreover, a look will be taken at the measures that the reform is meant to achieve and what is the effectiveness of this reform so far.

It is evident that many people who leave the country consist of people who have recently completed their secondary education. This results in brain drain as well because those people have a qualification that is required to have to enrol at a university programme in many countries in the world. By not enrolling at the Lithuanian universities and rather choosing other study destinations, those students are considered as people who can be included in the description of brain drain. This has a direct effect not only on the universities getting deserted and professors losing their jobs but also these students contribute to the growth of labour shortage in the long term. The quality of education in primary and secondary schools influences pupils' decision to leave the country after their graduation. The goal of the proposed reform is to assure that the quality of education from the moment a pupil enters primary school until the moment of the last years in gymnasium stays the same and provides satisfaction for pupils. Many students feel too much pressure from the current system and believe that they only concentrate on the final exams instead of having an experience of being a pupil who enjoys studying and having extra-curricular activities. In fact, the current Lithuanian pupil or high school student experiences too much of homework and in general feels too big of a pressure (Petrauskienė, 2017). This is where the Ministry is aiming to change students' experience and motivate everyone to continue their studies at the Lithuanian universities.

#### Implemented Measures Foreseen in the Reform

The educational reform performed by the Lithuanian Ministry of Education and Science has a purpose of modernising the educational system within the country. Among many different measures that intend to modernise the system and improve the quality of teaching, the most important is its main goal to preserve the future professionals and students who are the key factors for the country's future which population is aging significantly. In other words, the educational reform is aimed at solving the issue of brain drain which is present in the country and the current educational system is one of the factors why youngsters decide to follow their future carrier abroad instead of staying in their home country. As it was mentioned above, many factors such as high pressure of school and homework have an impact on students' attitude towards the education in their country, therefore many of them start researching and discovering other possibilities of educating themselves in foreign universities. The Ministry of Education and Science decided to change the educational system from its very starting point and instead of targeting the higher education, the changes will start at the first level of education, namely, at the level of primary education.

**Primary and secondary education.** Proposed changes at primary and secondary education are meant to be achieved by the year 2020. The ministry is keen on renewing teaching methods that are rather outdated and inadequate for pupils who are born and raised in the 21st century. More changes involve the implementation of a new grading system, which would consist of cumulative grades that one obtains throughout the educational period and which would reduce the importance of the final exams (Ministry of Education and Science, 2018). The latter change is exactly what would help to reduce the pressure on students that is felt during their period of studying at high school when students completely dedicate their time on preparation for final exams instead of developing other skills that are needed besides academical ones. Moreover, according to the publication about the State of Education in Lithuania (Lithuanian: Lietuva. Švietimo būklės apžvalga) (2018) by the Lithuanian Ministry of Education and Science, another problem that is addressed by this reform is the gap between schools that operate in cities and the countryside. The gap between the schools operating in cities and the countryside is increasing regardless of better economic conditions and the constant raise in salaries. However, the increase of salaries was higher for those who lived in cities and their income increased by a third from 2013 till 2016, while on the other hand, the income for those who lived in the countryside increased only by a fifth in the same period. The lower increase in salaries for Lithuanian citizens who live in regions had an effect on the quality of education, therefore the gap between the students' performance living in cities and in the countryside was increasing because of lesser investments from the local

communities and municipalities (p. 12). The reform anticipated appointing more attention and investments to schools that perform poorer than other schools in the country. Besides more investments to schools that perform poorer than others, 700 out of 1125 schools will already receive extra funding for establishing new technologies in their classrooms which would assure the modernisation of teaching (Gaučaitė, 2018). Moreover, to increase the quality of teaching, teachers will be attending various workshops and activities that will help them to develop more professionally and that their knowledge is up to date and not outdated. Financially speaking, teachers will experience growth in their salaries because a big portion of the budget that is coming together with the reform will be appointed to teachers' salaries (Ministry of Education and Science, 2018).

**Vocational training schools.** Vocational training schools (VTS) have not had any limitations in enrolment numbers so far. Students had a variety of choices of which professions they would like to study at VTS and those schools did not have any quotas on how many students could enrol to a certain programme. As of this year, the Ministry of Education and Science and its reform have changed the system and introduced new rules on future enrolments. The enrolments would be limited to a certain number, the number of professions and study programmes would be adjusted in accordance with a demand of which professions are needed for the Lithuanian labour market. The reform itself intends to narrow the current number of professionals with various profiles and aims to prevent people from choosing a profession which does not have a demand on the current labour market. By doing so, people who finish their studies at VTS would have greater chances of being employed at the sphere of their educational background and the path of migrating abroad would be reduced and ideally stopped. Moreover, the teaching methods at VTS would be transformed with a focus on introducing more practical activities that are related to students' professions. These practical activities would ensure that the students get more practice and first-hand experience at the chosen field of their profession which again is one of the aims that the reform intends future professionals to have and be prepared for the labour market (Ministry of Education and Science, 2018).

**Universities.** The situation in higher education is about to be changed as well. Previous reforms initiated the reduction of universities since the Lithuanian population was decreasing due to emigration waves. The Baltic News Service (BNS) provides data about the number of universities per 1 million citizens. Today, there are 14,5 higher education institutions for 1 million inhabitants in Lithuania, while the average number in Europe reaches 4,6 universities per 1 million inhabitants (BNS, 2015). The decreasing population has influenced the total amount of enrolments, consequently the number of students became smaller, however, the number of universities stayed

the same but on the other hand, the number of university programmes increased. Therefore, the educational reform focused on reducing the total amount of universities by combining some of them which have similar educational agendas, making smaller universities to be parts of a bigger university. Moreover, the reform focuses on establishing better cooperation between universities, making sure that similar study programmes will be removed and modified so that each programme becomes more unique.

What is more, one of the main goals is also to establish a better environment for students by allowing them to apply their knowledge in various projects instead of only learning theory. The budget for the reform involves the raise in teachers and professors' salaries which is estimated to raise by 16% already in 2019 (Ministry of Education and Science, 2018). Other goals that are initiated by the reform are the establishment of more state-funded programmes that would attract more students to partake in Lithuanian tertiary education and the shortening of the current 4-year programmes by one year (Gaučaitė, 2018). What is more, scholarships for doctorate degree students are being increased. As the interviewee from the Lithuanian Ministry of Education and Science Genovaitė Bingelienė indicated, scholarships for doctorate degree students from the Lithuanian state will be increasing. The figure below visualises the increase of the scholarships for doctorate degree students who are in their first year and higher until 2018 and from 2019.

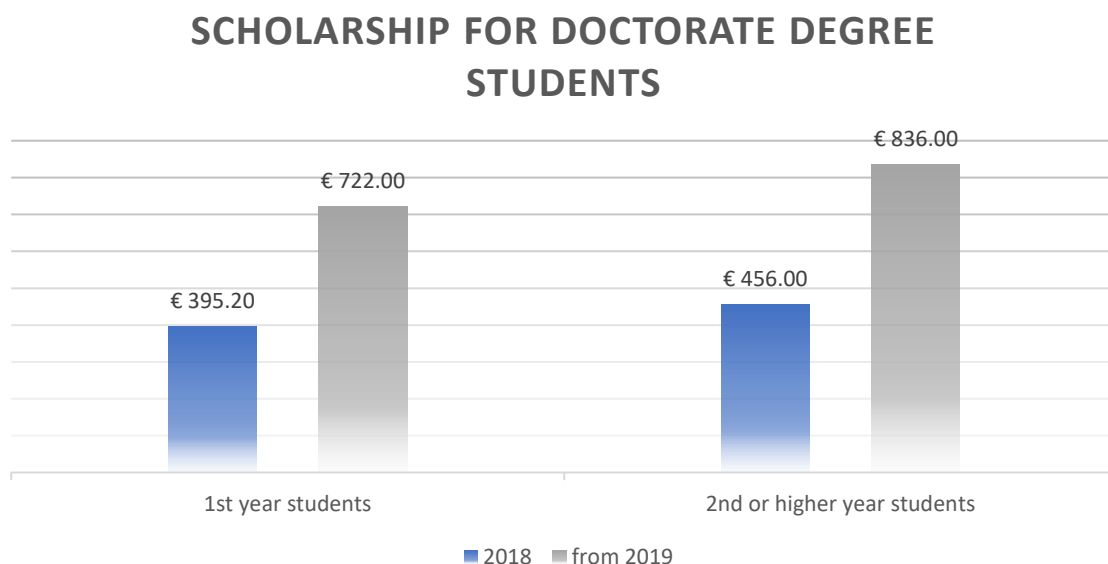


Figure 7. Compiled from: (Bingelienė, personal communication, December 2018)

In conclusion, as this thesis proposes, the second attempt to reduce brain drain in Lithuania was the second educational reform in the country. While the first reform did not complete nor implement its set goals including the structural reform of universities, this had an impact on the

decreasing amount of enrolments. The unfinished job from the first reform resulted in another reform because brain drain in Lithuania was increasing. The country still had too many universities which meant that they had to be filled with students, however, there were not enough of students to do that. A lot of implications were noticed from the unfinished reform and yet the new reform is not fully focusing on the structural reform, however, the universities are already signing merging agreements. Moreover, it was found out that Lithuanian high-school students are not prepared for further studies well enough because too much pressure is appointed to the final state exams. Luckily, the new reform has foreseen the change in teaching strategies, contents and grading system which would help in preparing students for the university education in a more suitable manner. Concerning the academia, a lot of funds are appointed to increase salaries for teachers, professors and scientists and of course, more funds will be appointed for scientific research. The increasing salaries and scholarships for doctorate degree students will contribute to the fact that more and more people will decide to pursue their scientific carriers in Lithuania, instead of relocating to another country because the salaries will become competitive and more attractive. The research found that even though the reform is facing some inner problems and a lot of dissatisfaction is felt regarding the implementation of this reform, the reform is still needed to tackle the brain drain in Lithuania.

### Third attempt: Financial Subsidy for Young Families

As the research suggests, brain drain and emigration have changed and affected the demographic situation in Lithuania negatively. The research showed that the population in Lithuania has decreased by at least 10% which also led to its population to age. The ageing population and constantly decreasing birth rate contribute to a rapid decrease in the Lithuanian population. Besides the previous two attempts by the Ministry of Education and Science to modernise the educational system, another ministry has also stepped in the fight against emigration and brain drain. The Lithuanian Ministry of Social Security and Labour introduced a project to improve the quality of life in the country. The aim of this project is to provide a financial help for young families, where the members of a married couple are younger than 35 years old, by subsidising 15% to 30% (depending on how many members there are in the family) of the total value of their first real estate which could be either purchased or built. Nevertheless, the size of the subsidy cannot exceed 87 thousand euros per family. The purpose of this project is to reduce emigration and its consequences such as brain drain, to better the demographic conditions such as birth rate and to strengthen the regions economically (Seimas, 2018).

The Prime Minister of the Republic of Lithuania Saulius Skvernelis (2018) stated that the project on subsidising families' first real estate:

Will support families, will motivate the birth rate and will provide help for young people to establish in our country, so they do not have to look for alternatives abroad. In addition to that, the project will strengthen the regions and will attract more young people to relocate there. Strong and vivid regions, provided and stable families are our top priority (Ministry of Social Security and Labour, 2018).

The referred regions of Lithuania are the municipalities and regions which are not part of the major Lithuanian cities and municipalities and which GDP is lower than those of the major Lithuanian cities and municipalities. The size of the subsidy varies as mentioned from 15% to 30% and it depends on how many children one family has. *Figure 8* indicates the precise percentage of the subsidy based on the size of their family. The subsidy appears to have four different sizes which as mentioned before depending on how many children does one family have.

### Size of subsidy of the total amount of first real estate

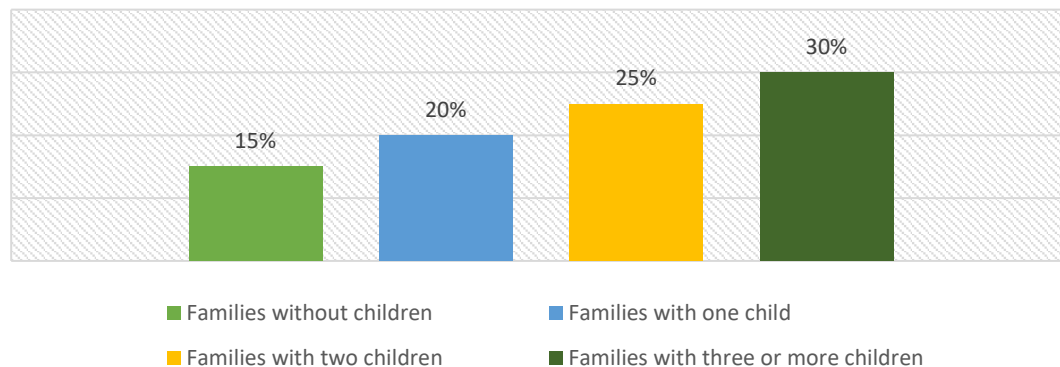


Figure 8. Compiled from: (Ministry of Social Security and Labour, 2018)

As it appears, the Lithuanian government is trying to introduce more changes in the country besides the two educational reforms. The financial subsidy for young families is a great tool to encourage more people to establish in Lithuania by either purchasing or building their first home. What is more, the Ministry of Social Security and Labour is expecting that the subsidy will contribute to an increase in Lithuanian population, it will encourage more people to return and stay in the country instead of living their lives in emigration. Another expected outcome of this project is to revive the regions of Lithuania and to increase the population there as well because Lithuanian regions are the largest providers of all the emigrants that leave the country.



## Discussion

As it was found out, brain drain is a phenomenon during which highly skilled and educated people migrate from their home country to another, for a purpose to earn more for the same qualification job. Such migration occurs as an exchange between less economically strong and more economically advanced countries. The concept of brain drain is rather a broad term, however, in the case of Lithuania, it can be understood as a lost investment into human capital. The conducted research showed that this is exactly what has been happening in Lithuania during the period of the country's mass emigration. As scholars Juozas Bagdanavičius and Zita Jodkonienė (2008) suggest, Lithuania experienced a loss of people who acquired various qualifications, meaning that the country invested many resources into its people with a hope that one day those people will repay the state by working and paying taxes (p. 56-57). However, Lithuania is seen to lose these investments due to brain drain and this is because many people have taken an opportunity to move abroad because of the economic situation in Lithuania. Nevertheless, the economic situation was not the only reason for the mass emigration. There were a few more circumstances that had an impact on Lithuanians leaving the country, for example, the 2004 accession to the European Union which played a significant role in the history of emigration. Even though the accession to the EU benefited Lithuania more than it disadvantaged it, the benefits had a price tag after few years post-accession.

The process of joining the European Union gave Lithuania many freedoms such as free movement of people and freedom of establishment in the member states. Such freedoms caused a great decrease in the Lithuanian population especially after the financial crisis that hit the world. The process of mass emigration started in 2010 and lasted until 2017 when the total population of Lithuania decreased roughly by 300 thousand people. This number may not seem high, although considering the number of inhabitants in Lithuania that makes about 10% of the current population. To answer the main question whether the measures taken by the Lithuanian government to solve brain drain were effective, a closer look will be taken in the following paragraphs.

The conducted research has found that organisational setting within various institutions and organisations influences brain drain. Such settings include the satisfaction at work and the relationship between its workers and employers and not to forget the low pay. As the research argues, being underpaid is a factor that also pushes people to leave their country. Many Lithuanian workers and professionals decided to look for better working environments and conditions abroad because of their dissatisfaction at work. As Kostas Zalatoris (Panevėžio Balsas, 2017) stated, the working environment can highly contribute to one's decision to look for another job abroad

especially if the employee also feels underpaid. Indeed, as the research suggests, the problem of brain drain affected Lithuania because many people were underpaid, while most people in the older member states of the EU earned bigger sums for the same qualification job. This dissertation argues that the push factors that motivated a lot of skilled workers to emigrate and leave Lithuania with a huge shortage of working power were unfavourable salaries. The interviewee Mr Jonas depicted, that if Lithuania does not increase its salaries at least to the EU's average, people will most certainly choose the path of emigration (Mr Jonas, personal communication, November 28, 2018). The research found, that the Lithuanian government has increased the minimal and average monthly salaries yearly, although, the raise of the mentioned salaries are still not close to the EU's average yet, which means that emigration and brain drain are not significantly decreasing. Figure 9 shows the amount of minimal and average salaries before taxes from the year of 2015 until the year of 2019 in which the raise of salaries is already set in stone by the Ministry of Social Security and Labour.

### Monthly salary in Lithuania prior tax

	2015	2016	2017	2018	2019
<b>Minimal</b>	300€	350€	380€	400€	555€
<b>Average</b>	714,1€	774€	840,4€	927€	1200€

Figure 9. Compiled from: (Jankaitytė, 2018), (Simėnas, 2018), (Statistics Lithuania, 2018)

Moreover, the research revealed that brain drain is a consequence of actions that are performed by the state. Scholar Alexander Hellemans (2001) in his report described how one state can fail in keeping its citizens and especially the ones possessing high qualifications which in the future could be used for the country's future development. An example of Italy and its brain drain was used to provide a rather fitting example of what could happen when a state does not prioritise education and does not provide working places for its professors. This brings the research to compare the situation with Lithuania. Another scholar Romualdas Kalytis (2004) argued and listed several reasons why brain drain is happening in the first place. He indicated that Lithuania failed to invest in and support scientific researches, it failed to provide appropriate funding for its scientists and professors. Moreover, the country did not initiate enough of efforts to increase the minimal and average salaries for its workers prior the country accessed to the European Union, and it underpaid to its professional staff, which consequently started leaving Lithuania for countries where scientists and professors are paid much better. As Kalytis stressed, a lot of attention should be brought to education if the country would like to assure that the population stays in the country to further

study and work and later to create families, which would solve many demographic problems. Nonetheless, research showed that Lithuanian government has initiated a better funding system for the scientific research, increase of scientists' salaries from the year of 2014 and from next year, namely, 2019 the funding will see a major increase (Bingelienė, personal communication, December, 2018).

Were the Targeted Goals to Tackle the Issue of Brain Drain Achieved?

Lithuania attempted to solve its brain drain problem by reforming its educational system with a strategy of 2003, which would last until 2012. The Lithuanian government created a strategy to improve the state of education. Not all the proposed ideas were implemented, some of those that were implemented included free pre-schooling for children who came from poor families, compulsory pre-schooling, hiring of yellow school buses which would bring pupils to school who live further away and modernisation of many schools. However, the reform was not as effective as anticipated, and this thesis states that one of the reasons that explain the lack of success of the reform was a poor performance by the municipalities. As Izokaitis, Naginevičiūtė and Kondratavičiūtė (2008) argued, municipalities had a lot of power to implement what was seen to be more convenient or not, meaning that a lot of reforms proposed by the strategy were left out even though they were suitable for every school and would have helped to improve the quality of teaching. What is more, another biggest problem that occurred in this strategy was rather a small budget. As the research showed, the funding for the final years of the strategy decreased even though a lot has been left to complete. One of the interviews revealed that the implementation period has faced various obstacles and besides a rather small budget there was a lack of qualified specialists and inside communication problems were also present (Bingelienė, personal communication, December, 2018). One of the most important incomplete actions that were left, was a structural reform of the university system. The system was meant to face a reduction in the number of universities that the country has. For this day, Lithuania still has 33 active universities, which is too large for a country that has less than three million people. It can be argued that the problem of funding was influenced by the financial crisis when a lot of cuts were made, and the government went into austerity. Such cuts stopped the reform from being implemented fully which resulted in more problems that came later because of the unfinished job and such problems will be discussed later in this discussion.

This dissertation argues that the first attempt mentioned in this research to modernise and change the structure of Lithuanian education has failed. The first attempt of reducing brain drain, therefore, was not a success. The survey conducted by Juozas Bagdanavičius and Zita Jodkonienė

(2008) about the attitude of civil servants in Lithuania showed that 80% of the civil servants who had thoughts of leaving Lithuania, want to pursue their career abroad at the institutions of the European Union. It is important to know that the civil servants who took part in the survey accounted for 14% of the total number of the civil servants from the Lithuanian Parliament and the Ministry of Economy of the Republic of Lithuania (p. 57). Such numbers already signalise that the situation in Lithuania is not favourable and it has the potential to become a serious threat to Lithuania in the future. Indeed, the threat is real because the attempts to reduce brain drain with the educational strategy are not bringing the wished results and on the contrary, people who should be working towards the bettering of the situation in the country are also the ones that might be potential leavers.

Furthermore, shortly after the mentioned reform has ended without a wished success, Lithuanian universities faced an issue that has not been present before. The enrolments to the Lithuanian universities started decreasing and soon it was realised that such a phenomenon does not promise any good. This was one of the consequences of not implementing the educational reform properly in the first place. Ministry of Education and Science (2018) realising that the previous attempt was not a success indicated that changes are needed to be brought to maintain a healthy balance of students enrolled at Lithuanian universities. If nothing was being done, many smaller and less popular universities would be closed, and this would lead many teachers and professors to become unemployed. Therefore, the Ministry of Education and Science of the Republic of Lithuania initiated a second attempt which would touch every aspect of education, starting from the primary level and ending in proper financing for scientific research. According to the information provided by Mr Jonas during the interview conducted for this dissertation, the programme and purpose of the reform and its goals are very righteous. If the reform was implemented properly, the set goal of reducing brain drain in Lithuania would be achieved and it would most certainly reduce the number of people emigrating Lithuania in general. Mr Jonas adds that at this moment the higher education system goes through a huge crisis because the earlier reform was not implemented properly. The previous reform did not focus on the structural changes such as the reduction of universities in Lithuania. As mentioned before, the universities failed to fill in many spots with students and this soon brought a huge disbalance. All the financial support appointed for the previous reform was used inefficiently which resulted in small and insignificant growth in teachers' salaries. It is important to realise, that while the salaries of teachers are not increasing, the image of teachers' profession is diminishing and becoming less appreciated, meaning that there are less and fewer people choosing the path of being a teacher, including young people as well, which soon will result in to shortage of young teachers (Mr Jonas, personal communication, November 28, 2018).

The plans of the new reform are more feasible, and the funding is properly distributed to different educational stages. Teachers of various schools and universities, so do professors, are already experiencing increasing wages, students go to school longer since the Lithuanian school year was one of the shortest in the European Union. What is more, the universities are signing partnerships and merging treaties among each other, meaning that the number of universities will become smaller and some universities will become faculties or certain institutions of other and more important university. This will have a positive effect on the country's educational system because currently, Lithuania has 33 universities, where for its population it should have less than eight as the interviewee suggests (Mr Jonas, personal communication, November 28, 2018). Such steps will contribute to the teaching quality of students, it will also assure that each programme is unique and there are no similar programmes in other educational institutions. However, the reform has not reached its main goal so far. As Mr Jonas states, the implementation phase of the reform does not show successful results yet and there are several reasons listed that might influence such unsuccessful implementation. The reasons that the interviewee lists are not known to the public, but it is obvious that the Lithuanian government and the Ministry of Education and Science are not performing their job properly. Although, Mr Jonas depicts that the reasons for the unsuccessful implementation can relate to the internal communication problems, low support from the society and incapability to gain support before the reform started being implemented. Nevertheless, it is difficult to evaluate whether the programme is inappropriate, or the process of implementation is, therefore there should be someone who could do inner analysis in the Ministry itself, Mr Jonas adds (Mr Jonas, personal communication, November 28, 2018).

This research suggests that there is a serious dissatisfaction of the activities of the Minister of Education. It was found out that many parliamentarians do not have any faith in the reform being performed by the Minister Jurgita Petrauskienė. When Mr Jonas was asked whether those who have no faith in the Minister have a reason to do so, he stated that it is natural to always put blame on the one who has the highest authority. In this case, Minister Petrauskienė was the one who approved and signed the reform because she thought that she will be able to implement it. Therefore, in this case, those people are right to blame her. However, it is unclear whether the reform fails because of her incompetence or perhaps there were more factors involved such as the lack of resources says Mr Jonas. To sum up, it is yet unknown how effective this measure of the Lithuanian government is, but it is established that the Ministry has learnt from its mistakes and it paid a proper attention to the aspects that lacked attention from the Lithuanian state, such as, proper funding for research and improving the quality of education in general.

The research proposes that there was a third attempt by the Lithuanian government to stop the emigration from the country. Ministry of Social Security and Labour introduced financial help for young families to establish in Lithuania by buying or building property. Such a gesture is very welcomed because young people are motivated to stay in the country and have their own property which partially would be subsidised by the Lithuanian government. As research shows the size of subsidy varies from 15% to 30% depending on the size of a family. However, it is important to know whether such measure is effective towards the reduction of brain drain. According to the data provided by the ministry, already this year there were 115 families benefiting from the subsidy. The number seems small, nevertheless, there are already 590 families that qualify and will take part in receiving the subsidy (Ministry of Social Security and Labour, 2018). This measure has been encouraging people to stay in the country and obtain their own property where they can establish and create families, which consequently decreases social demographic problems such as ageing population and at the same time increases the birth rate.

Based on research, it is evident that brain drain in Lithuania is still an issue that needs to be tackled and more attention needs to be appointed to prevent serious problems that might appear in the future. While qualified and educated people are leaving Lithuania, there is a shortage of qualified labour force and at the same time, a surplus of the unqualified labour force is increasing. It was found out that Lithuania is losing its human capital and the investments that the country made for its citizens, meaning that the measures taken by the Lithuanian government to solve the issue of brain drain were not effectively implemented. Although the proposed reforms have had a righteous agenda and goals, the implementation has however shown otherwise. As Mr Jonas indicated, looking from the professional and academic perspective, the current reform is of a great purpose and if everything went according to the plan, the problem of brain drain would be solved (Mr Jonas, personal communication, November 28, 2018). Nevertheless, the conducted research showed that the measures taken by the Lithuanian government to address the problem of brain drain have no positive contribution to the reduction of brain drain so far. Some measures such as the increase of salaries are contributing to the quality of life in Lithuania and the educational reform is bettering the quality of education, however, those are not the measures that help the country to overcome the problem of brain drain. Even though the net international migration in Lithuania is decreasing, yet it is negative, the number of people leaving Lithuania is still quite high.

## Conclusion

In conclusion, the research found that Lithuania, a small state in the Baltic region, is a country that loses its most talented and qualified people. The problem of brain drain and the reduction of emigration are the major issues that the country should prioritise promptly. In the case of Lithuania, the mass emigration from the country has not only involved unqualified labour force but also those who possess higher education diplomas, those who are highly qualified and those who have the skills needed for the country's labour market and economy. One of the factors that powered the rapid emigration was the 2004 Lithuania's accession to the European Union. The European Union benefited Lithuania with plentiful policies such as the free movement of people and the freedom of establishment in any other EU member state. Moreover, the membership in the EU has granted Lithuanian citizens to seek employment without work permits which have made it less difficult to establish in another EU country. Besides the factors that powered the problem of brain drain in Lithuania, there are a variety of reasons why such a complex problem is present in the country.

The conducted research has revealed that the poorly functioning economy in the country and the Lithuanian government's incapability to prioritise education were the most prominent reasons that prompted the issue of brain drain in Lithuania. The major problems that were related to the economic situation were the uncompetitive and low salaries for unqualified and qualified working people in Lithuania. According to the research, many scientists and other highly educated and skilled people have left the country because their salaries were not proportionate and did not motivate people to work and pay taxes for their country. The same low salary situation applied to the people who were doing unqualified jobs, therefore the country faced the mass emigration from 2010 as well. The rapid emigration from the country has caused a series of problems such as the lack of working force and an increasing economic gap between people living in the cities and people from rural areas. What is more, Lithuania has lost its investments into human capital because the people that were prepared for the Lithuanian market have emigrated. Besides the lost investments, the Lithuanian demographics have changed along. During the years of mass emigration, the Lithuanian population has decreased by 10%, moreover, the population started aging faster considering the declining birth rate due to the biggest group of people that emigrated were aged between 18 to 34 years old and accounted for 50.7% of the total emigrants. In the interim, positive effects have also occurred during the period of mass emigration. The unemployment rate has dropped by slightly more than 10% while the number of people immigrating has been increasing. It is evident that the issue of brain drain is a threat to the country's prosperity, it affects the country's economy and demographics.

The conducted research has shown that the Lithuanian government has attempted to address the occurrence of brain drain. The Lithuanian government and its several ministries have created several strategies to overcome brain drain by reforming and modernising the educational system and by creating a better financing system for scientific research in the country. First, the Lithuanian government had the 2003-2012 strategy for a purpose to reform the educational system in the country. The strategy was performed until a certain extent although the wished results and targeted goals were not achieved. The problems that were present during the implementation period of the strategy were analysed by multiple scholars and listed by the Ministry of Education and Science, which was responsible for the strategy. The major problems that prevented the strategy to be fully implemented were inside communication problems, low support from the society and other governmental institutions and as the Ministry indicated the budget was rather low. One of the biggest goals of the strategy was, of course, to reduce brain drain by applying a structural reform of the education, however, the structural reform was not completed, therefore the strategy was not successfully implemented.

Consequently, the unsuccessful strategy has left the educational system disadvantaged. Since the structural reform was not implemented and there were still too many universities in Lithuania, most of them started to experience the lack of enrolments, which meant that universities will start losing a lot of money, the professors will lose their jobs and the state itself will have to pay a huge price to help the universities. Therefore, the Ministry of Education and Science created another educational reform that would help to change the educational system from the primary level till the university level and prevent brain drain. The new educational reform has anticipated appointing a lot more funds to reform the educational system by modernising equipment, changing the grading system, the content of learning and putting stress on informal learning. The reform assured that scholarships and salaries for doctorate degree students, teachers, professors and scientists will raise and such action will prevent many bright people from choosing other countries for work. Although the intentions of the reform are of a great purpose, the practice showed differently. The research suggests that currently not much has been accomplished and the reform is facing a great uncertainty because the Minister of Education is not performing well. The reform has faced internal problems that are yet unknown to the public however, it is evident that many public figures and people are displeased by the performance of the Minister. So far, the salaries for academics are increasing and as of 2019 they will face an even bigger increase, however, the structural reform of the education and to be more precise the reduction of universities is still not completed. Even though there are many universities signing the partnership and merging agreements, there is no specific date when it will be clear that the number of Lithuanian universities will reduce from 33 to



less than 10. It is not yet clear whether this measure to reduce brain drain will be effective, however, emigration and brain drain is still an issue in Lithuania.

Furthermore, there was another measure taken in Lithuania to stop brain drain. The Lithuanian government together with the Ministry of Social Security and Labour has introduced a financial subsidy for young families to help them to purchase or build their first real estate. The subsidy was a measure to boost the rate of people getting married, birth rate and of course to prevent people from leaving Lithuania by helping them to establish in the country. From the data provided by the Lithuanian parliament, it was seen that roughly 600 young families are registered for the subsidy this year compared with 115 families from last year.

This research found and indicated several measures that the Lithuanian government has taken to address the issue of brain drain that affects the country from 2004 and provided the information about each measure. Moreover, the effectiveness of the listed measures was analysed and therefore evaluated. Based on the conducted research, brain drain is still an issue in Lithuania that needs to be tackled and more attention needs to be appointed. The measures taken by the Lithuanian government to solve the issue of brain drain are seen to be inefficient based on their unsuccessful implementation. While some of the proposed aspects of the measures are implemented and boost the better life for those in the country, emigration and brain drain are still present. The research suggests that if the living standards in Lithuania such as competitive salaries will not be as close to the EU's average, the number of people leaving Lithuania will not see a decrease.

## Recommendations

As the research argues, brain drain in Lithuania is still an on-going issue that affects the country since 2004 and the most measures that were taken to tackle this issue have not provided the country with the wished results. Many measures proposed by the Lithuanian government have had an intention to reduce the emigration rate in the country, however, such measures were not successfully implemented. The research found out that some of the biggest problems of the unsuccessful implementation of the measures to tackle the issue of brain drain in Lithuania were inner communication problems between the main actors who were responsible for various attempts to solve brain drain and of course the low financial support. Based on the conducted research and the information that was collected during the researching period, one could presume what could be done better to reduce the issue of brain drain in Lithuania. Therefore, the following paragraphs will contain several recommendations and suggestions of what could be done better in order to reduce emigration and specifically brain drain in Lithuania.

Since one of the biggest reasons for emigration from Lithuania were related to the low pay, there is no doubt that the Lithuanian government should appoint a better focus on salaries. This research provided several graphs on how the salaries in Lithuania have been increasing in the past years, however, it was found out that the increase in those salaries did not have any positive impact on emigration. Despite that the growth of salaries in Lithuania was one of the most rapid in Europe, the cost of living in the country was still very high due to high prices. Since Lithuania is a member of the European Union and the Eurozone and its economy is doing well, the salaries in the country should meet at least the EU's average if the country wants to reduce emigration and brain drain. If such a step is ignored, Lithuanian people will keep departing to the older member states where salaries are competitive and appropriate.

What is more, the Lithuanian government has attempted to reduce brain drain by modernising and reforming its educational system. Such a measure was taken to apply the structural reform of education by reducing the number of universities in the country which currently is too high for the small Lithuanian population. The most recent reform has included a better financial support system for academia's salaries and scientific research, however, it has not yet performed the structural reform. Based on this research it can be assumed that in order to achieve the wished results proper attention needs to be appointed to the structural reform which was started in 2003 and has not been finished for this day. Moreover, to reduce emigration and brain drain in Lithuania through the educational reforms, it is necessary to plan the strategies in accordance to the available funds and in addition to that, the objectives of various strategies need to be specific and achievable. The current amount of universities which is 33 consists of too many similar study programmes which

makes every graduate alike. Graduates of many different universities after the completion of their study have a very similar educational background which consequently increases the competition between the graduates in the future. Such competition results in many graduates not having a job that is related to one's educational background and from that more problems like brain waste derive. Such 'wasted brains' are in a direct link with the phenomenon of brain drain because people possessing various qualifications and university degrees have no possibilities to find a job in their country. If the current number of universities is not reduced to less than 10, the Lithuanian government will lose a lot of money to maintain a large amount of universities where the enrolments are decreasing due to reducing population. Such unnecessary expenditures will consist of the maintenance of facilities in universities, salaries for the academia and keeping the universities that are becoming deserted functioning.

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## Appendices

## Appendix 1

**Student Ethics Form**

**Your name:** Martynas Jankauskas

**Supervisor:** Mihaela Anghel

**Instructions/checklist**

Before completing this form, you should read the APA Ethics Code (<http://www.apa.org/ethics/code/index.aspx>). If you are planning research with human subjects you should also look at the sample consent form available in the Final Project and Dissertation Guide.

- a. ☐ Read section 3 that your supervisor will have to sign. Make sure that you cover all these issues in section 1.
- b. ☐ Complete sections 1 and, if you are using human subjects, section 2, of this form, and sign it.
- c. ☐ Ask your project supervisor to read these sections (and the draft consent form if you have one) and sign the form.
- d. ☐ Append this signed form as an appendix to your dissertation.

***Section 1. Project Outline (to be completed by student)***

(i) **Title of Project:**

Departing brains: How effective were the measures to tackle the issue of brain drain in Lithuania?

(ii) **Aims of project:**

The aim of this project is to look at the issue of brain drain in Lithuania and what actions has the Lithuanian government taken to solve it. The chosen time frame to research brain drain occurrence is from 2004 when the country joined the European Union because it is believed that the accession to the EU impacted the more rapid departure of Lithuanians to the older member states. This dissertation researches the measures that were taken by the Lithuanian government to tackle the problem of brain drain and argues whether such measures were effective.

(iii) **Will you involve other people in your project – e.g. via formal or informal interviews, group discussions, questionnaires, internet surveys etc.? (Note: if you are using data that has already been collected by another researcher – e.g. recordings or transcripts of conversations given to you by your supervisor, you should answer 'NO' to this question.)**

YES / NO

**Section 2 Complete this section only if you answered YES to question (iii) above.****(i) What will the participants have to do? (v. brief outline of procedure):**

The participants will be interviewed digitally. Before the interviews happen, the interviewees will be acknowledged about the topic and intentions of this research. The questions will also be sent to them beforehand, so the interviewees can decide whether they want to contribute to this dissertation by providing information and their opinion on the concerned topic.

**(ii) What sort of people will the participants be and how will they be recruited?**

The participants will be public figures that have a direct link with the concerned topic. This research intends to contact the Ministry of Education and Science that is a crucial actor in this project. Moreover, an educational institution will also be contacted in order to have an opinion from not only the Ministry but also from someone that is affected by the Ministry's actions, such as, changes in educational system etc.

The participants will be contacted via email due to their working location being Lithuania and this project's the Netherlands.

**(iii) What sort stimuli or materials will your participants be exposed to, tick the appropriate boxes and then state what they are in the space below?**

Questionnaires [ V ]; Pictures [ ]; Sounds [ ]; Words [ V ]; Other [ ].

- (iv) Consent:** Informed consent must be obtained for all participants before they take part in your project. Either verbally or by means of an informed consent form you should state what participants will be doing, drawing attention to anything they could conceivably object to subsequently. You should also state how they can withdraw from the study at any time and the measures you are taking to ensure the confidentiality of data. A standard informed consent form is available in the Dissertation Manual.

**(v) What procedures will you follow in order to guarantee the confidentiality of participants' data?**

Personal data including real name, the name of the organisation and function will not be stored in such a way that they can be associated with the participant's data. A pseudonym will be used throughout the project if needed.

Student's signature:



date: 07/01/2019



Supervisor's signature:

\_\_\_\_\_

date: 07/01/2019



## Appendix 2

**Informed Consent Form**

- 1) Brain drain in Lithuania
- 2) This project intends to research the measures that have been taken by the Lithuanian government to solve the issue of brain drain. The chosen period to be looked at is from 2004, the year when Lithuania accessed to the European Union. The accession was one of the reasons why the Lithuanian citizens started emigrating to other European countries due to the open borders policy and freedom to establish in other member states. The project goes in depth and analyses the taken measures and evaluates their effectiveness. Moreover, it discusses whether the goals set by the Lithuanian government to solve the problem of brain drain were achieved.

The interviewee wished to be anonymous, therefore the interviewee will be referred to as Mr Jonas. Moreover, since the consent form will be a part of this dissertation and the dissertation will be public, this consent reform is not signed in order to protect interviewee's identity. The signed consent form is only in the possession of author of this dissertation.

**If you agree to take part in this study, please read the following statement and sign this form.**

**I am 16 years of age or older.**

I can confirm that I have read and understood the description and aims of this research. The researcher has answered all the questions that I had to my satisfaction.

I agree to the audio recording of my interview with the researcher.

I understand that the researcher offers me the following guarantees:

**All information will be treated in the strictest confidence. My name will not be used in the study** unless I give permission for it.

Recordings will be accessible only by the researcher. Unless otherwise agreed, **anonymity will be ensured at all times. Pseudonyms will be used in the transcriptions.**

I can ask for the recording to be stopped at any time and anything to be deleted from it.

I consent to take part in the research on the basis of the guarantees outlined above.

**Signed: X**

**Date: 28-11-2018**

## Appendix 3

**Original transcript of the interview 1**

- Tai pirmiausia norėčiau paklausti ar turiu leidimą įrašyti šitą pokalbį?

Taip, iš tavo „terms and conditions“ kur atsiuntei, reiškia, tu nenaudoji niekur mano vardo ir pavardės ir tas interviu yra visas anoniminis?

- Jeigu Jūs to norite, tada taip.

Čia matai, kaip pasakyt, čia aš tau pasakysiu tokia situacija. Kadangi aš esu [confidential] veidas, tai reiškia, kad bet koks publikavimas turi būti iš anksto approve'intas. Jeigu tu mane kažkur cituosi, tarkim kokiame nors kontekste, ir jeigu tai yra vieša erdvė, tai tada tas turėtų ateiti pas mus į marketingo skyrių ir jie turėtų pritarti, nes aš esu organizacijos veidas. Tai jeigu aš formuoju oficialią nuomonę ir pasisakau tam tikrais dalykais, kai kurie klausimai yra politiškai jautrūs ir jeigu mes tuos, politiškai jautrius klausimus, turime atsakyti mano nuomone, mes turime susitarti.

- Tada kaip Jums yra geriau. Man tai yra svarbiausia, kad aš galiu naudoti informaciją ir svarbiausia, kad Jūs sutinkate, kad Jūsų vardas yra neminimas. Jei Jums tai yra geriau.

Man taip yra geriau. Ateity mes išvengsime visokių nemalonių dalykų, kad tu turėtum manęs atsiklausti ar gali naudoti šitą informaciją ir tai užims daug laiko.

- Tai gerai tada, tai bus anonimiška.

Okay. Ar tau viskas gerai dėl to tyrimo?

- Taip taip taip. Man svarbiausia yra informacija ir čia interviu yra vien dėl to, kad parodyti įgytus sugebėjimus, kad ne tik mes galime gauti informaciją internetu ar skaitydami knygas, bet ir galiu atlikti interviu bei gauti kitokios informacijos.

O tu kokiam universitete studijuoji?

- Aš studijuoju Hagos Taikomųjų Mokslų Universitete.

Tu per mus važiavai ar per kitą organizaciją?

- Važiavau per kitą organizaciją. Tai tada, suprantu, kad neturime daug laiko, dar kartą noriu padėkoti už interviu.

Turime iki pusvalandžio, gerai?

- Labai gerai tada. Aš Jums keletą klausimų atsiunčiau iš anksto ir kadangi teturime pusę valandos, pradėkime nuo pirmo klausimo:

1. Kaip dažnai Jums tenka susidurti su tema „protų nutekėjimas ir emigracija“?

Tai Lietuvos spaudoje šita tema yra pastoviai eksplotuojama, bet ji labiau kalba apie emigraciją negu apie protų nutekėjimą. Protų nutekėjimas yra didesnė problema, mano nuomone, bet apie tai yra klaba šiek tiek mažiau, tai kaip dažnai, tai – dažnai. Kokio dažnumo tau reikėtų?

- Tai tiesiog, pavyzdžiui, ar Jums tenka susidurti su šia tema darbo aplinkoje?

Taip man tenka susidurti nuolat, kadangi mes konsultuojame dėl studijų užsienyje. Tai natūraliai mes tokius klausimus gauname, nes kadangi mes esame edukacinė bendrovė švietime.

- Gerai, aišku. Ar Jūs esate familiarus su Švietimo ir Mokslo reformomis, buvo reforma nuo 2003 iki 2012 metų, ir dabar yra naujausioji reforma. Ar teko girdėti? Kokia Jūsų nuomonė yra apie tai? Tarkim, apie naujausią reformą.

Kokį jos aspektą mes dabar turėtumėme paliesti? Ten yra apie daug ką kalbėti, bendrai ar konkrečiai?

2. Ar ŠMM reforma yra tinkamas sprendimas, tinkama priemonė, spręsti protų nutekėjimą?

Aš pasakysiu, taip kaip yra parašyta pačioje reformoje, pagrindinė mintis, tai man iš esmės daugiau mažiau visi dalykai patinka, bet ar įgyvendimas vyksta taip, kaip buvo sugalvota, tai jau čia kitas klausimas. Programinės nuostatos ir ką programa yra užsibrėžusi įgyvendinti, tai skamba natūraliai gerai ir mano nuomone programa tikrai yra gera.

3. Jūsų nuomone, ar ŠMM daro savo geriausią darbą, kad implementuot šitą reformą ir, kad pasiekti geriausius rezultatus?

Vertint kažkieno darbą, kaip jie daro, kaip jie nedaro, aš galiu vertint tik iš tos pusės, kur aš matau kas vyksta, tai todėl aš sakyčiau, kad jiems nesiseka. Dabar įvardint tas nesisekimo priežastis, tai galėtų būti netinkamos komunikacijos priežastys, bendruomenės nepalaikymo priežastys, galbūt jie neužsitikrino iš anksartinio palaikymo. Čia kažkas turbūt turėtų daryti vidinę analizę, nes tik jie žino, kokių veiksmų viduje buvo imtasi ir kokie veiksmas pasiteisino ir kokie - ne. Ir jeigu žiūrėti iš opozicijos, ar jiems sekasi ar ne, tai tikrai ne. Tai tas yra kaip ir akivaizdu, bet ar jie daro savo darbą gerai ar ne, mes turime jau rezultatą ir iš jo matome, kad jie nedaro gerai savo darbo. Tai vėl kyla klausimas ar programa bloga... bet tai galima teigti jeigu kas atliktų nuveiktų darbų analizę. O mes kadangi viduje nesame, tai mes tik matome išorinę pusę. Vertint Ministerijos kompetenciją mes neturime pakankamai duomenų.

4. Ar Jūs manote, kad ši reforma prisidės prie emigracijos ir protų nutekėjimo stabdymo? Nes vistiek, protai dar nuteka ir Ministerija nori užkirsti tam kelią, padarnat edukaciją prieinamesne, geresne ir geresnios kokybės, kad mokytojai būtų patenkinti ir to pasekoje, kad mokiniai būtų patenkinti. Ar Jūs galvojat, kad išeis pasiekti užsibrėžtų tikslų?

Programa ir jos pačios tikslai yra gan geri ir jeigu ją pavyktų įgyvendinti ir pasiekti tuos tikslus, tai ji tikrai padėtų, bet iki šiol jos nepavyksta įgyvendinti.. Tai gal pati programa yra utopinė ar vykdymas yra netinkamas. Tai mes matome pirminę idėją ir rezultatą, tačiau mes nematome tarpinės dalies ir negalime dar jos aptarti ir tiksliai pasakyti, kodėl jiems nesiseka. Matom, kad nesiseka, bet nežinom kodėl.

- Bet socialinė medija skelbia visokiausius straipsnius apie ministrę ir sako, kad parlamentariai ir kiti ministrai yra nepatenkinti ir labai kritikuoja ją bei jos veiklą. Ar gali tai būti, kad tai yra vieno žmogaus kaltė? Gal užsibrėžti tikslai yra per dideli?

Kai projektas nepasiseka, neįvyksta taip, kaip turėjo įvykti, natūraliai vadovas turi prisiimti kaltę. Dabar ta kaltė, ar tikrai ji buvo ministrės kontrolės zonoje, mes nežinome. Gal tai įvyko nuo dalykų tiesiog nepriklausomė dėl ministrės. Bet jeigu ji prisiėmė įgyvendinti šią reformą, tai tada tai turėtų būti jos kaltė. Ir jeigu mes ieškome kaltų, tai tada aukščiausiam lygmenyje, kaltas yra ministras, kuris patvirtino reformą ir ėmėsi ją vykdyti, nes tikėjosi, kad gali ją įvykdyti. Tai šiuo požiūriu galima teigti, kad tai yra ministrės kaltė. Bet ar tai yra jos kompetencija nepakankama ar trūko kokių nors išteklių, mes tiesiog nežinome, nes su ja mes nedarbome. Ir informacija iš medijos, nebūtinai yra tiesa ir nebūtinai yra netiesa, bet mes negalime susidaryti tikslaus ir teisingo požiūrio vien iš laikraščių.

5. Kokia yra Jūsų nuomonė dėl lietuviškos švietimo sistemos?

Šiuo metu jinai išgyvena labai didelę krizę, nes pati reforma nebuvo įgyvendinta iki galo ir realiai mažėjant moksleivių skaičiui ir neįvykusus struktūrinei reformai, kas nutiko, tai švietimo sistemai skirti pinigai buvo panaudojami neefektyviai, to pasekoje atsirado labai didelis disbalansas ir mokytojai negali tinkamai uždirbti, nors ir pinigų buvo skirta pakankamai. Mokytojam nepakankamai uždirbant, nebesivysto mokytojų prestižas, nes tada mokytoja nebėra prestižinė specialybė ir tada „geriausi protai“ ir geriausi jauni žmonės tenai neina, ir tada natūraliai mokytojų bendras amžius sensta ir nebevyksta jokia evoliucija mokytojavimo srity. Paskutinėse mokyklos klasėse yra daroma didelė klaida, nes privalomieji valstybiniai egzaminai yra vienodi visiems, pavyzdžiui, dabar matematika jau yra privaloma visiems, nors matematika yra toks dalykas kur tik 30% žmonių turi aukštus sugebėjimus ją spręsti, kol 40% turi vidutnius sugebėjimus ir visi likusieji

turi žemesnius sugebėjimus. Tai, mano nuomone, yra visiška diskriminacija, nes žmonės kurie neturi prigimtinių matematinių sugebėjimų yra verčiami ją mokytis ir net samdyti korepetitorius ir tada švietimo sistema tampa vienus, nes ji nelavina visų gebėjimų, tik kalbinius ir loginius gebėjimus. Minėti du gebėjimai yra labai svarbūs, bet šiandienos pasaulyje jų neužtenka. Universitetiniame lavinime mes turime smarkiai per daug universitetų, nes studentų skaičius artėja prie abiturientų skaičiaus, tai apie kokią kokybę ir konkurenciją mes galime kalbėti. Man labai patinka palyginti su Singapūru, Singapūras turi 4,5 milijonų gyventojų ir tik keturis universitetus, du iš jų yra penkiadešimtuke ir dar vienas yra pasaulio dešimtuke. Lietuvoje didelis universitetų skaičius yra nereikalingas ir struktūrinė reforma yra būtina.

- Ar mokiniai yra tinkamai paruošiami ir informuojami apie profesionalią karjerą ir kas jų laukia po dvylikos klasių?

Aš pasakyčiau kitaip, mokiniai yra neruošiami profesinei karjerai, nes karjeros valandų nėra arba jų yra visiškai nepakankama. Jauni žmonės neturi tinkamų gebėjimų sąmoningai pasirinkti karjerą.

- Daug žmonių taip mano, kad mokiniai yra per daug prispausti mokytis tik valstybiniais egzaminams, tiesa?

Taip, mūsų sistema yra taip pastatyta, nes mokykloms reikia reitingų ir reitingai yra matuojami pagal mokinių rezultatus valstybiniuose egzaminuose ir kur jų abiturientai įstojo po to ir kiek uždirba po universiteto baigimo. Pavyzdžiui, paimkime Angliją ar tą pačią Olandiją, gi reitingai nėra skaičiuojami pagal kaip gerai mokiniai išlaikė matematiką. Mokyklos net gauna geresnį finansavimą jei jų mokiniai pasirodo geriausiai valstybiniuose egzaminuose. Problema yra per didelė skatinimo politika dar mokykloje. O lavinti žmones siekti tinkamos karjeros jie net neskiria pinigų.

6. Kokios tendencijos šiandien yra akivaizdžios tarp Lietuvos studentų, renkantis studijas Lietuvoje ir užsienyje?

Iš apytiksliai 30 000 abiturientų, 10-15% galvoja apie studijas užsienyje ir kasmet apie 2000 jaunų žmonių išvažiuoja studijuoti svetur.

7. Su kokiomis problemomis tenka susidurti jauniems žmonėms ieškant tinkamų studijų Lietuvoje? Jūs minėjote, kad yra per daug universitetų, per daug panašių studijų programų?

Pagrindinė problema yra tame, kad studentai neturi jokių problemų įstoti į universitetą. Žmogus atėjęs į valstybinius egzaminus, net gavęs labai mažą, bet vis dar patenkinamą rezultatą, jisai gali mokytis universitete ir tai yra pagrindinė problema.

- Tai reiškia, kad Lietuviškuose universitetuose beveik nėra jokios konkurencijos stojant?

Taip, konkurencija yra labai maža. Yra programų, kur konkurencija yra labai didelė, žinoma, bet daugiausia konkurencija yra gan maža. Dar viena opi problema yra tai, kad jauni žmonės nežino ką jie nori veikti ir to pasekoje, dar viena problema yra ta, kad jie gali mokytis betkur. Universitetų yra per daug, jie veikia kaip mėsos kombinatai ir žmonės yra ta mėsa, kurie turi užpildyti laisvas universiteto vietas.

- Ir žinoma, mokyklose turėtų būti skirta daugiau dėmesio profesinei karjerai, tiesa?

Taip, tai turėtų būti natūralu. Dabar kitos organizacijos bando steigti centrus, kuriuose jauni žmonės galėtų siekti pagalbos ir patarimo, jų ateities planams. Gaila, kad tam nėra skiriama dėmesio mokyklose.

#### 8. Ar Jūs žinote kiek maždaug į Lietuvą grįžta studentų, kurie studijuoja užsienyje?

Tikslių skaičių neturime, bet grįžta labai daug ir mes tuos studentus matome grįžtančius atgal į Lietuvą. Daug buvusių studentų įsidarbina pas mus, kiti kitur. Grįžtančių tikrai yra.

- Ar grįžtantys žmonės yra laukiami?

Taip, jie yra be abejo laukiami. Jie turi kitokias kvalifikacijas, kitokią motyvaciją ir ne tik dėl to jie yra laukiami, svarbu ar jie gali save tinkamai parduoti ir ar jų lūkesčiai atitiks Lietuvos pasiūlą. Tarkime, jei tu užsienyje gaudavai 2000 eurų atlyginimą ir mokėjai 800 eurų už butą, o Lietuvoje gausi 1000 ir mokėsi 500 už būstą, tai 700 eurų skirtumas yra didelis. Bet šiuo metu darbo sąlygos Lietuvoje yra labai geros, ypač, trūksta kvalifikuotos darbo jėgos, atlyginimai sparčiai kyla, tai tendencija yra matoma, kad žmonės pradės grįžti vis daugiau ir daugiau.

#### 9. Kokios yra vienos iš svarbiausių emigracijos ir protų nutekėjimo priežasčių?

Tai nėra visiškai valsybės kaltė, ekonomika gali būti ir yra viena iš priežasčių, bet yra kitos priežastys kodėl žmonės išvyksta. Tai yra saugumo klausimai, pripažinimo klausimai, galimybė gauti išsilavinimą. Dabar ekonominė situacija Lietuvoje yra gerokai geresnė nei ji buvo prieš penkis metus, Europoje augimas nepakito kaip jis pakito Lietuvoje. Dabar protai pradėjo grįžti dėl gerėjančio pragyvenimo lygio Lietuvoje. Kol Lietuva nepasieks ES vidutinio lygio, protai toliau teks ir emigracija nenustos. Kol kas dar niekam nepavyko sustabdyti protų nutekėjimo, nes tai yra labai komplikotas procesas.

#### 10. Gal turite kokių idėjų kas galėtų būti padaryta, norint susigrąžinti protus ar pritraukti naujus protus tam, kad kompensuoti prarastuosius?

Aš manau, kad tai iš dalies jau vyksta, dabar Lietuvoje formuojasi IT cluster'is, jau IT darbuotojai beveik nebevažiuoja svetur, vis daugiau ir daugiau naujų IT darbuotojų atvažiuoja iš kitų šalių dirbti į Lietuvą. Dabar alga IT sektoriuje siekia tokias pačias sumas kaip ir vakaruose. Bet daugiau aš neturiu jokio recepto, kas galėtų būti padaryta daugiau. Pats protų nutekėjimas yra gerai ar blogai.. Kai Lietuvis dirba Oksforde ir jis agituoja savo šalį, visiems noriai kalba apie savo šaknis ir tėvynę, tai šiuo atveju protų nutekėjimas nėra didelė problema. Vartojant žodį „nutekėjimas“ mes galvojame, kad kažką praradome, bet gal iš tiesų mes kažką atradome. Sustabdyti protų nutekėjimą tai tas pats kas bandyti tūrėti daugiau saulėtų dienų per metus.

- Tai Jūs sakote, kad tai yra neišvengiamas procesas ir tai ne tik priklauso nuo vidinių faktorių bet ir nuo išorinių?

Taip, aš manyčiau, kad tai nėra uždara sistema. Mes negalime kontroliuoti visko. Kai neliko atstumų dėl globalizacijos, tai pasidarė lengviau vis atrasti kažką kito.

- Gerai, dėkoju Jums labai už šitą pokalbį, daugiau klausimų neturiu, tikrai man pagelbėjote su savo atsakymais.

Nėra už ką, tikiuosi, kad informacija bus naudinga ir linkius sėkmės pabaigiant savo tyrimą. Atsiprašu, kad teko ilgai laukti. Viso gero!

- Niekio tokio. Geros Jums dienos!

**Translated transcript of the interview 1 in English**

- First, I would like to ask if I have your permission to record this interview?

Yes, from the terms and conditions that you sent me I see that my name can be anonymous. Is it true?

- Yes, if this is what you wish.

I will describe the situation to you. Since I am the face of [confidential] organisation, this means that any publication made, must be approved. If you decide to cite me, let's say, in any context, if it is a public space, then you must reach out to the marketing department of my organisation. If I form an official idea related to certain and politically sensitive topics, in my opinion we should make an agreement.

- We will do what is best for you. It is only important to gain the information that is according to you appropriate to share and if it is the case that you want your name to be anonymous, it is completely fine.

It is better to me to stick to anonymity. It will also be more convenient to you because you will avoid all the hustle and official paper work with my organisation, which unless would cost a lot of your time.

- It is good with me. We will have your anonymity assured.

Where do you study once again?

- I study at The Hague University of Applied Sciences.

Did you apply for your studies with us or did you use another organisation?

- I used another organisation. As I understand, we are time-bounded, therefore I would like to thank once again for your time.

Yes, indeed, the time is limited.

- Therefore, I sent you the questions in advance and let's begin with the first one:

1. How often do you encounter the topic "brain drain and emigration"?

In Lithuanian press you can constantly notice that this topic is exploited a lot, however it is more focused on emigration rather than brain drain. In my opinion, brain drain is a more serious topic that should be addressed. How often do I hear about it, could you please specify?

- Yes of course. For example, does your working environment make you deal with his topic?



Yes, since my organisation is a consultancy agency for studies abroad. It is natural that we face questions related to this topic.

- Thank you. Are you familiar with the educational reforms of the Ministry of Education and Science from 2003 to 2012 and with the most recent one? What is your opinion about them, to be more precise, let's focus on the recent reform.

Exactly which aspect should I touch upon? There is a lot to talk about it in general and in depth.

2. Is the reform the right solution, the right measure to take to solve brain drain?

To be honest, as the reform depicts itself, the main idea according to me sounds incredibly nice, I like every aspect of it, however the implementation says different. The goals that are meant to achieve and the programme of the reform is very appealing and, in my opinion, sounds great.

3. Based on your thoughts, does the Ministry of Education and Science do its best work to implement the reform and achieve the set goals?

To evaluate someone's work, how they do it and how they do not do it, is rather difficult. I can evaluate only from one side which is present to public and based on this I see that the implementation fails. To list a few reasons of failure, it might be inside communication problems, weak support from the society and perhaps they did not assure themselves in the Ministry to have more support in advance. Someone needs to do inside analysis, because only the Ministry knows all the reasons. Looking from the opposition, whether they are successful or not, it is a big no. It is obvious that they do not perform a good job, however we cannot say whether they are doing their job correct or not. Then there is a question coming up, perhaps the reform is bad? But as I said, there should be inside analysis made to draw conclusions later. To evaluate the competences of the Ministry, we simply do not have the right information.

4. Do you believe that this reform will contribute to the reduction of brain drain and emigration? "Brains are still draining" and the Ministry claims that they want stop people from leaving by making the education more available and reachable to everyone, by improving the quality of teaching and in the end to satisfy the teachers and professors which consequently would satisfy the students as well.

The programme of the reform and the purpose of it are great, and if one day the Ministry achieves their set goals and purposes, it would positively contribute to the reduction of brain drain and even perhaps emigration, however, so far, they are still failing to do so. Perhaps the programme is too utopian, or the implementation is. We can only see the main idea and the result; however, we

cannot see the middle of it, how the reform is going and how it is being implemented. We see it is failing, but we do not see why.

- However social media publishes several articles about the minister of the Ministry of Education and Science, saying that many parliamentarians and other ministers have no faith in her and the reform, they are criticizing her and her activity. Is it possible that it is one person's fault? Perhaps the goals are too ambitious?

When a project fails, it is natural that the leader of it is one to blame for. Let's say this accusation, we are not sure whether the implementation fails because of her, maybe it was not in her control, we do not know. Perhaps the failure had nothing to do with the minister. However, if she took the initiative and signed the reform and decided to implement it, then in the highest level, it is the fault of the minister who agreed to that reform, because she believed that reform will be a success. Therefore, based on that, I could state that it is her fault. Although, we do not know whether she was incompetent, whether they did not have enough of resources. The information from media is neither correct nor incorrect 100%, yet we cannot form a precise and correct opinion on that matter.

##### 5. What is your opinion about the educational system in Lithuania?

At this point, the system is going through huge crisis because the reform was not fully implemented and while the number of students is decreasing and the structural reform is not being completed, what happens is, that all the financial support appointed to the reform is used inefficiently and ineffectively, therefore consequently it disbalances the system and teachers cannot earn proper salaries, even though the funding for increasing teachers' salaries was very appropriate. While teachers' salaries are not increasing, their reputation and image of such profession is no longer appreciated, therefore there are less or none of young people choosing the path of becoming a teacher and this consequently impacts the aging population of staff and stops any kind of evolution in teachers' "circle". In the last years of schools there is a huge mistake being done, because the state exams are all compulsory and all the same with the same difficulty to everyone, for instance, math is a subject of which only 30% of the world's population has a gift to achieve great results, while 40% has an intermediate capability of dealing with math and the rest has a low ability or no natural understanding about math, therefore many students that are not into math are forced to study extra and hire private teachers. This way the system is rather discriminating and close-minded because it does not encourage people to follow other subjects which would better suits many students, instead a huge focus is appointed to math and languages, which are not necessarily bad but nowadays they are not enough. In the higher education we have too many schools, the

number of university graduates is reaching the same number as high-school graduates, so we cannot talk about any competition. I like to compare Singapore, it only has 4.5 million of inhabitants and only four universities, two of them are in top 50, while one of them is in world's top 10. The number of universities in Lithuania (33) is completely unnecessary and structural reform needs to be implemented as soon as possible.

- Are high-school students properly prepared and informed about the professional world and career and what awaits after graduate?

I would for this differently, students are not prepared at all for the professional world and career, because there are no specific hours for professional orientation or there is a very small and insignificant amount of them. Young people do not have appropriate capabilities to choose a career path.

- Many people think, that students are pressured too much for their final state exams, is that right?

Yes, our system is build this way, so schools would gain better ranking which are based on students' performance at state exams and to which universities their graduates apply and how much they earn afterwards. For example, let's take England and the Netherlands, those ratings are not based on how much one scored on math's exam. Our schools even receive more financing if their students performed well in the state exams. The problem is constant prompting of students to achieve better results, which for the students are not that necessary to have. The educational system in Lithuania gives zero euros for schools to offer professional orientation classes.

6. Which tendencies are obvious between Lithuanian students in choosing studies in the country and abroad?

Out of approximately 30 000 high-school graduates, 10-15% are thinking about studying abroad and yearly there are around 2000 of young people that leave Lithuania for other universities abroad.

7. Which problems do Lithuanian students face before choosing the right study? You have mentioned that there are too many universities and too many similar programmes.

The main problem is that students do not have any difficulties to be accepted to study at any Lithuanian university. Any person that completed the state exams even with the lowest, yet sufficient results, can enrol to a university.

- Does this mean that there is no competition before being accepted at any programme?

Yes, the competition is very small. Of course, there are programmes where competition is huge, however mostly it is rather small. One more significant problem is that people do not know what they want to study, therefore they apply to any problem because there is no competition. The competition does not exist because there are too many universities whose spots need to be filled with students.

- Schools should have professional orientation and should pay more attention to career opportunities, is that correct?

Yes, that should be natural. So far only organisations like mine and various institutions try to establish career centres where students can explore future career paths to decide their future studies. Sadly, there is no attention paid at all by schools.

8. Do you know roughly how many people after studying abroad come back to Lithuania?

I do not know exact numbers but there are many people coming back and I see those students. Many post-graduates come and become employed at my organisation. I assure, that people come back.

- Those who come back, are they welcomed?

Yes of course they are. They have different qualifications and better motivation and therefore they are welcome to come back. It is important that would understand that Lithuania does not offers same opportunities as the richer countries. If one earned 2000 euros and paid 800 for his or her apartment abroad and in Lithuania s/he would earn 1000 euros and pay for apartment 500 euros, the difference is very big because based on that, the person would be 700 euros short. If s/he is fine with that, they would really contribute to the labour market which now lacks qualified people. Nevertheless, the working conditions are becoming better and better in Lithuania.

9. What are the biggest reasons influencing emigration and brain drain?

It is not a complete fault of the government, economy is one of the reasons clearly. There are more reasons such as safety, recognition and possibility to be properly educated. The economy in Lithuania is better than ever and better than five years ago. The economic growth in the EU was way smaller, while in Lithuania it was big. Now, the “brains are returning” because of the improved living standards in the country. Till Lithuania reaches the EU average in economic aspect, the problem of brain drain, and emigration will be present. So far, no one has solved the issue of brain drain because it is rather a complicated process.

10. Do you have any ideas of what could be done to achieve brain gain?

I believe that brain gain is already happening. Now there is an IT cluster forming in Lithuania, IT specialist no longer leave the country and many more people started to settle in Lithuania to work at the IT sector. The salaries are very attractive and people at the IT sector in Lithuania earn as much as in the west. Brain drain can be bad, but it can also be good. Let's consider a Lithuanian person who works in Oxford, s/he can spread a good word about Lithuania, s/he is always positive about it and shares good insights about it, therefore in this case a benefit for the country is obvious. By using the term "brain drain" we assume that have lost someone or something but, perhaps we have found someone or something new. To stop brain drain is the same as to try to increase the number of sunny days that one country has per year.

- Do you mean that brain drain is inevitable, and it depends not only on internal but also external factors?

Yes, I believe that it is not a closed system. We cannot control everything. When the distances due to globalisation decreased, it became easier to explore other possibilities.

- Alright, thank you very much for this conversation, I do not have any further questions. It really helped to me that you could partake in this interview.

You are welcome, it is a pleasure of mine to contribute to your thesis. I wish you all the best and I am sorry that I made you wait for so long. Goodbye!

- No problem at all. Have a great day!

## Appendix 4

**Answers provided by Genovaitė Bingelienė, senior specialist at the Department of Communications of the Lithuanian Ministry of Education and Science**

1. Gal galėtumėte aptarti kokių priemonių buvo imtasi LR Švietimo ir Mokslo Ministerijos stabdant protų nutekėjimą ir emigraciją?

*(Could you please describe the measures of the Ministry of Education and Science taken to address brain and emigration?)*

Protų nutekėjimas stabdomas didinant MTEP finansavimą, mokslininkų atlyginimus ir doktorantų stipendijas, ir taip siekiant padaryti mokslininko karjerą patrauklesnę.

*(Prevention of brain drain was accelerated by increasing the funding for scientific research and experiments, salaries for the academia and scholarships for doctoral degree students, for a reason to make the career of being a scientist more attractive.)*

Pastaraisiais metais finansavimas mokslininkams tyrimams, eksperimentinei plėtrai (MTEP) ir meno veiklai pastoviai didėjo. Didžiausias jo pokytis – 2019 m., palyginti su 2018 m. Pavyzdžiui, mokslo ir studijų institucijoms kaip asignavimų valdytojams skiriamas finansavimas MTEP ir menui 2019 m. (palyginti su 2018 m.) padidėjo 18,5 proc., kai 2014 – 2017 m. jo augimas sudarė vidutiniškai 8,5 proc. per metus. Konkursinis MTEP finansavimas per Lietuvos mokslo tarybą ir Mokslo, inovacijų ir technologijų agentūrą pastaraisiais metais išliko nepakitęs. Be to, šiuo metu yra didinama parama (stipendijos) doktorantams ir dėstytojams, mokslo darbuotojų ir kitų tyrėjų atlyginimai.

*(The funding for scientific research, scientific experiments and arts in recent year was increasing. The most significant increase will be in 2019. For example, the funding for educational institutions will increase by 18.5%, while in 2014-2017 the funding increased by only 8.5%. At the moment we are increasing the amount of scholarship for doctoral degree students)*

Dabar pirmųjų metų doktorantui kas mėnesį yra teikiama 395,20 Eur (10,4 bazinės socialinės išmokos, BSI) dydžio parama (stipendija), o antrųjų–ketvirtųjų metų – 456,00 Eur (12,0 BSI). Nuo 2019 m. sausio 1 d. ši parama doktorantams didinama 83 proc. Pirmųjų metų doktorantams kas mėnesį bus teikiama 722 Eur (19,0 BSI) dydžio parama, o antrųjų–ketvirtųjų metų – 836 Eur (22,0 BSI). Šiam tikslui skiriama 8,2 mln. Eur asignavimų.

*(First year doctoral degree student receives a scholarship of €395.2, second year and higher - €456 per month. The scholarship increases by 83% from 2019 – first year student will receive €722 while second year and higher will get €836. For this purpose, the system appoints €8.2 million.)*

Palaipsniui didinami dėstytojų, mokslo darbuotojų ir kitų tyrėjų atlyginimai:

- 2017 m. pirmą kartą nuo 2009 m. didėjo mažiausiai uždirbančių mokslininkų atlyginimai (tam skirta 3,1 mln. Eur)
- 2018 m. dėstytojų ir mokslininkų atlyginimai vidutiniškai padidinti 20 proc. (tam skirta 23 mln. Eur)
- Nuo 2019 m. sausio 1 d. dėstytojų ir mokslininkų atlyginimai didinami dar apie 16 proc. (šiam tikslui papildomai skiriama dar 23 mln. Eur asignavimų). Bendras atlyginimų padidinimas per du metus (palyginti su 2017 m.) sudarys apie 40 proc.

2. Su kokiais sunkumais teko susidurti įgyvendinant minėtą strategiją?

*(What difficulties were faced while implementing the mentioned reform?)*

Sunku išlaikyti dėmesį ilgalaikės strategijos tikslams ir uždaviniams, žymiai daugiau dėmesio skiriama vidutinės trukmės politinėms LR vyriausybės programoms ir jų įgyvendinimo priemonių planams, lėšų stoka, kvalifikuotų specialistų stoka, komunikacijos problemos ir kt.

*(It is hard to maintain the full focus during the implementation for long reforms, more attention was pointed to other and shorter reforms, a lack of proper budget, a lack of qualified staff, communication problems etc.)*

3. Ar užsibrėžti tikslai buvo įgyvendinti?

*(Were the targeted goals achieved?)*

Iš dalies, ne visus siekinius pavyko 100 proc. pasiekti. To meto situacijos apžvalgą galite rasti internete.

*(Not all the goals were achieved by 100%. The overview of the previous reform can be accessed through the link below.)*

[http://www.smm.lt/uploads/lawacts/docs/687\\_650d5478b696d9d351908e4319271eb2.pdf](http://www.smm.lt/uploads/lawacts/docs/687_650d5478b696d9d351908e4319271eb2.pdf)

Bet reikia turėti galvoje, kad švietimas labai inertiškai, galutinė nuveiktų darbų įtaka pasireiškia kiek vėliau, bent po keleto metų. Kai kurie siekiniai, kurie 2011-2012 metais dar nebuvo galutinai pasiekti, tai dabar jau įgyvendinti (pavyzdžiui, vidurinio išsilavinimo lygis ir kt.). Dar vienas aspektas – švietimo stebėsenos sistema 2003 metais dar nebuvo labai išvystyta ir buvo sunku prognozuoti tikėtiną švietimo raidą, todėl kai kuriais atvejais (pavyzdžiui, aukštojo išsilavinimo lygio siekinys) siekiniai buvo pernelyg optimistiški.

*(It is important to keep in mind that education is a complex topic and many changes might only be noticed latwe. Some of the goals that were not achived by 2011-2012 how now occurred to be completed. One more problem was that in 2003 the monitoring system of the educational system*

*was not properly developed, therefore it was hard to predict whether the development of education.)*

4. Kaip naujoji 2018-ųjų metų švietimo reforma bus kitokia nei ankstesnioji?

*(How is the new reform different than the previous one?)*

Nelabai aišku, apie ką klausiate. Yra nauja Valstybinė 2013-2022 metų švietimo strategija, yra 2017-2020 metų LR vyriausybės programa, o šiemet paskelbta švietimo struktūrinė reforma, sudaryta iš 6 prioritetinių projektų. Tikėtina, kad klausiate apie šiemet paskelbtą struktūrinę švietimo reformą, bet reikia žinoti, kad tai gerokai siauresnės apimties planavimo dokumentas tiek laiko prasme (2018-2020 m., iš dalies ir 2021 m.), tiek turinio (jis apima tik didžiąją dalį dar nebaigtų vykdyti LR Vyriausybės programos įgyvendinimo darbų). Praktiškai visi darbai mažesniu ar didesniu laipsniu yra naujovės, t.y. kitoks turinys, nei iki šiol: naujas bendrojo ugdymo turinys, atliepiantis per pastaruosius metus išryškėjusias pasaulines tendencijas, kitoks mokinių vertinimas (akcentas kaupiamajam vertinimui ir individualiai pažangai), gausesnis aprūpinimas laboratorine įranga ir kompiuteriais, gausesnės investicijos į neformalųjį švietimą ir jo turinio įvairovę (neformaliojo švietimo krepšelis, mokinio kultūros pasas), profesinių ir aukštųjų mokyklų tinklo pertvarka, mokymosi visą gyvenimą plėtra su koordinavimo įpareigojimu savivaldybių lygmeniu, kokybės užtikrinimo mechanizmai ikimokyklinio, neformaliojo ir naujos metodikos kituose švietimo sektoriuose, finansavimo pertvarkos (etatinis mokytojų darbo apmokėjimas, klasės krepšelis, nemokamų bakalauro studijų šaliai svarbiausiose srityse prieinamumas, aukštųjų mokyklų finansavimas sutarčių ir specialistų užsakymo pagrindu, studijų užsienyje su įsipareigojimu sugrįžti finansavimas, kokybės krepšelis bendrajame ugdyme, pertvarkos profesinio mokymo ir mokslo finansavimo srityje ir t.t.).

*(The new reform is a set of new goals and the tasks that were not completed by the previous reforms. The structural reform is a part of the new reform. The new reform focuses on implementing innovations, new and modern methods of teaching, different grading system, a huge focus on extra curriculars and informal education. More attention is appointed for labs and scientific equipment for educational institutions. The programme of "Learning the whole life" is being implemented as well. The reform includes different payment system for teachers, more free bachelor programmes that are the most needed, subsidising students to go study abroad but with a condition to come back and work in Lithuania.)*

5. Ar naujoji reforma padės sumažinti protų nutekėjimą ir ar yra numatyta kokių nors priemonių skatinančių protų susigrąžinimą?



Šiuo metu Lietuvos mokslo taryba vykdo tokias protų susigrąžinimą ir pritraukimą skatinančias priemones:

- Mokslininkų kvalifikacijos tobulinimas vykdant aukšto lygio MTEP projektus (09.3.3-LMT-K-712), 33 mln. Eur
- Aukšto lygio tyrėjų grupių vykdomi moksliniai tyrimai (01.2.2-LMT-K-718), 28 mln. Eur;
- Mokslininkų iš užsienio pritraukimas vykdyti mokslinius tyrimus (01.2.2-LMT-K-718), 12 mln. Eur;
- Mokslininkų kompetencijos ugdymas vystant protų pritraukimą ir reintegraciją (09.3.3-LMT-K-712), 6 mln. Eur.

Finansuoti projektai atrenkami konkurso būdu.