

Czech University of Life Sciences Prague
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Diploma Thesis

Brain Drain in Mexico

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CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

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DIPLOMA THESIS ASSIGNMENT

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Thesis title

Brain drain in Mexico

Objectives of thesis

The main aim of the thesis is to determine the main reasons that influence the decision of the Highly Educated Mexicans to emigrate, specifically to the Czech Republic.

- Explore the existing literature concerning the Brain Drain phenomena.
- Identify the main reasons which needle the Highly Educated Mexicans to decide to emigrate, specifically to the CZ.
- Determine the academic background of highly educated Mexicans residing in the CZ and the approximate losses of the Mexican government for the investment in their education.
- Describe the Mexican migration to the Czech Republic in the last 10 years, from 2009 to 2019, as well as the arrival of the so-called "Mexican Brain Drain" during the same period.

Methodology

The thesis will be divided into three parts.

The first part is a theoretical one and is based on literature search. It defines the current state of knowledge in the field of the brain drain. In this part, articles, books, researches and different electronic resources will be used to provide information. Methodologically, this part of the thesis will be the analysis of documents.

The second part will rely on the theoretical part and it is the key component of the thesis. Methods of qualitative as well as quantitative research such as statistical and mathematical methods will be used in this part. The analysis will be done on the chosen country – Mexico.

The final part concludes the results of the previous parts and discusses it with another author.

The proposed extent of the thesis

60 – 80 pages

Keywords

International migration, education, Czech Republic, survey.

Recommended information sources

Borta, O. (2007). Brain Drain Controversy. Linköping, Sweden: Linköping University.

Flores, A., Bustamante, L., & Shah S. (2019). Facts on Hispanics of Mexican origin in the United States, 2017.

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Rapoport, H. (2002). Who is afraid of the Brain Drain? Human capital flight and growth in developing countries. Stanford, CA: Stanford Institute for Economic Policy Research.

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Declaration

I declare that I have worked on my diploma thesis titled "Brain Drain in Mexico" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the diploma thesis, I declare that the thesis does not break copyrights of any their person.

In Prague on March 31st, 2021

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Brain Drain in Mexico

Abstract

Migration is an issue vitally important for Mexico since in part its economy depends on it, in fact, Mexico receives more money from remittances than for international tourism or the petroleum industry. However, there is a branch in this subject that has been given little importance that is the brain drain, the purpose of this research is to contribute to the creation of information related to the subject and expose the current Mexican Brain Drain situation in the Czech Republic.

The main objective is to demonstrate which are the main reasons the Highly Educated Mexicans living in the Czech Republic decided to emigrate. Furthermore, to have an overview of their educational background and work experience prior to their emigration, and from there be able to approximate the losses Mexico faces due to the total public spending invested in their education. An online survey was developed to collect key information regarding the participants, from these and with data collected from official sources was possible to proceed with the corresponding calculations to approximate the current and definitive losses in the total public spending invested in education.

At the end of this research, there is sufficient evidence to affirm despite economic reasons such as the limited job opportunities and the low salaries in Mexico contribute to some nationals decide to emigrate. Those are not the main reasons why the Highly Educated Mexicans based in the Czech Republic decided to emigrate.

Keywords: Mexico – Czech Republic – International migration - Qualified migration – Brain Drain – Brain Gain – Analysis – Survey – Motivations – Economic impact

Odliv mozků z Mexika

Abstract

Migrace je pro Mexiko životně důležitým problémem, protože na něm částečně závisí jeho ekonomika. Ve skutečnosti, Mexiko dostává více peněz od svých občanů žijících v zahraničí, než z mezinárodního cestovního ruchu nebo z ropného průmyslu. V tomto odvětví však existuje obor, kterému byla věnována jen velmi malá pozornost, a to je “odliv inteligence”. Účelem tohoto výzkumu je přispět k vytváření informací souvisejících s tímto tématem a odhalit současnou situaci “mexické inteligence” v České republice.

Hlavním cílem této práce je ukázat hlavní důvody, proč se vysokoškolsky vzdělaní Mexičané rozhodli pro život v České republice. Dále také mít přehled o jejich akademické dráze a pracovních zkušenostech před emigrací a pokusit se přiblížit ztráty, kterým Mexiko čelí v důsledku celkových veřejných výdajů investovaných do jejich vzdělávání. Na toto téma byl vyvinut online výzkumu, který shromáždil klíčové informace zúčastněných. Z těchto informací bylo možné vypočítat současné a definitivní ztráty celkových výdajů investovaných do vzdělávacího systému.

Tento výzkum posbíral spoustu důkazů o důvodech emigrace Mexických občanů za hranice své země. Mezi hlavní ekonomické důvody patří omezené pracovní příležitosti a velmi nízké platy v Mexiku. Tyto důvody ovšem nejsou těmi hlavními, proč se vysokoškolsky vzdělaní Mexičané rozhodli odejít do České republiky.

Klíčová slova: Mexiko - Česká republika - Mezinárodní migrace - Kvalifikovaná migrace - Odliv mozků - Příliv mozků – Analýza – Průzkum – Motivace - Ekonomické dopady

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LIST OF ABBREVIATIONS

AZ. - Arizona.....	
CA. - California	
CONACYT - National Council of Science and Technology for its initials in Spanish.....	
CONAPO - National Population Council for its initials in Spanish.....	
CZ - Czech Republic.....	
CZK - Czech Crown	
CZSO - Czech Statistical Office	
DOF - Official Journal of the Federation for its initials in Spanish	
GCIM - Global Commission on International Migration	
ILL. - Illinois.....	
IME - Institute of Mexicans Abroad of its initials in Spanish	
INEE - National Institute of the Educational Evaluation for its initials in Spanish	
INEGI - National Institute of Statistics Geography and Informatics for its initials in Spanish.....	

IOM - International Organization for Migrants

IT. - Information Technology

MOI - Ministry of the Interior of the Czech Republic.....

MXN - Mexican Peso

OAS - Organization of American Continents

OECD - Organization for Economic Cooperation and Development

OPS - Pan American Health Organization for its initials in Spanish

Ph.D. - Doctor of Philosophy.....

SEP - Public Education Secretary for its initials in Spanish.....

SITEAL - Information System on Educational Trends in Latin America for its initials in Spanish.....

TX - Texas

UK. - United Kingdom

UN. - United Nations

UNAM - National Autonomous University of Mexico for its initials in Spanish.....

UNESCO - United Nations Educational Scientific and Cultural Organization.....

USA. - United States of America.....

USD - United States Dollar

1. INTRODUCTION

Mexico is a migrant exporting country; as stated by the Institute of Mexicans Abroad for its initials in Spanish-IME (2018). During 2017 the official number of registered nationals living out of Mexico was 11,848,537; nevertheless, according to Pew Research Center (cited by Flores, A., Bustamante, L., & Shah S. 2019) during the same year 2017, an analysis estimated there were 36.6 million Hispanics of Mexican origin living just in the neighbor country, United States. This is a clear example that exposes the alarming difference between official data provided by Mexican sources and American sources regarding migration data and statistics.

According to Forbes Mexico (2020) during the year 2020 the total remittances sent by the Mexican emigrants, will reach the amount of \$ 39.5 billion dollars. That amount sets Mexico as the 3rd country in the world that receives the most remittances as Barne D. & Pirlea F. (2019) stated. In accordance to Ortiz, A. (2019) the country has a huge dependency on remittances, Mexico receives more money from the remittances than from international tourism or the petroleum industry. Despite the importance of migration for the Mexican economy, exists a field in this topic that has been given little importance, this topic presents the fact that not all the people who emigrate from Mexico are low educated nor do so for having bad socio-economic conditions in the country.

The brain drain is a reality poorly studied in Mexico, there is not a lot of information available about the Highly Educated Mexican migrants who voluntarily leave the country, neither the losses this type of migration entails to Mexico. Those are the reasons which motivate the development of this research study, this Diploma Thesis contributes to generated knowledge regarding the topic and exposes the current Mexican Brain Drain situation focusing on the Mexican community-based in the Czech Republic. Relevant information such as the educational background, work experience, area of job development, and the reasons for their emigration will be recovered through an online survey. Afterward, it will be possible to calculate the approximate losses Mexico faces in branch of total public spending invested in education due to the brain drain against the Czech Republic.

This study seeks to create awareness of the importance of the brain drain topic and the urgency of collecting official and updated statistical data regarding this phenomenon. In the case of the Mexican Brain Drain, the fact of knowing how many Highly Educated Mexicans are out of the country and where these migrants are would help to get to know where the Mexican talent is. The topic is vitally important since the fact ignoring this information makes it harder for the Mexican authorities to be able to create policies for the retention and repatriation of Mexicans who live abroad moreover makes harder the creation of programs and networks that may benefit the origin country with help of the nationals based abroad.

This research is also important for the host country, by having knowledge of the previous educational background and work experience of the emigrants in the origin country, in this case Mexico, their profiles can be used to improve their contribution to the economic growth since a highly educated migrant will only contribute to creating a considerable wealth in the new country when his professional development is in the area of his previous education.

The **hypothesis** developed for this research states: Despite economic reasons such as the limited job opportunities and the low salaries in the country contribute to some Mexicans decide to emigrate, those are not the main reasons why the Highly Educated Mexicans based in the Czech Republic decided to emigrate from their country of origin.

The **scopes** of this research: This research and the results obtained through it, do not illustrate the actual situation globally, neither the situation for all the Highly Educated Mexicans who currently live in the Czech Republic. The research will focus only on a portion of the Highly Educated Mexican community living in the Czech Republic by the year 2020.

The **limitations** of this research:

1. The willingness of the Mexican community to contribute to this study through the developed survey to be able to get a representative sample and with it more exact results.
2. The lack of information and statistics in addition to the inconsistency in the existent data regarding migration by official Mexican entities.
3. The almost total absence of data and statistics regarding the Mexican Brain Drain at the moment of the research.

4. The short period for collecting data while it occurs a global pandemic makes it even harder the gathering information.

As the result of the research conducted, it is possible to state there is sufficient evidence in order to accept the research hypothesis.

2. OBJECTIVES AND METHODOLOGY

2.1 Objectives

To obtain the minimum level of knowledge necessary to fully understand the importance of this exploratory research, it is necessary to evaluate the existing literature concerning migration and brain drain. This objective will be achieved through the recapitulation of books, thesis, articles, and other tools that may provide relevant data. The Literature Review chapter will introduce relevant knowledge regarding appropriate terminology, a review of migration and brain drain both of them from a general to a more specific perspective. Besides the current situation, the causes and consequences of brain drain will be address as well as different critics, opinions, and perspectives on the topic.

A survey will be developed in order to determine the main reasons that influenced the decision of the Highly Educated Mexicans based in the Czech Republic to emigrate. The survey will identify the educational background and work experience of the Highly Educated Mexican migrants, moreover, the field in which they currently develop professionally, and other helpful information for this research. Pursuant to the data obtained through the survey and helped with information recovered over the point 4.2-Mexico's investment in Education, it will be possible to make the calculations needed to approximate the losses Mexico faces in the field of total public spending invested in the education of the nationals who reside in the Czech Republic.

In order to describe the Mexican migration trends to the Czech Republic in the last 10 years, from 2009-2019, the data will be recovered from the Czech Statistical Office-CZSO.

Research question:

- Q1: Are the economic reasons such as limited job opportunities and the low salaries in the country the main reasons why the Highly Educated Mexicans based in the Czech Republic decided to emigrate from their origin country?

Main Aim:

- Identify the reasons which induced the Highly Educated Mexicans based in the Czech Republic to decide to emigrate.

Specific aims:

- Explore the existing literature concerning migration and the brain drain phenomena.
- Identify the main reasons which needed the Highly Educated Mexicans based in the Czech Republic to decide to emigrate.
- Determine the academic path and work experience of Highly Educated Mexicans residing in the Czech Republic.
- Calculate the approximate losses Mexico faces in the branch of total public spending invested in the education of the Highly Educated Mexican community residing in the Czech Republic.
- Describe the Mexican migration trends to the Czech Republic during the last 10 years, from 2009 to 2019.

Hypothesis:

- Despite economic reasons such as limited job opportunities and the low salaries in the country contribute to some Mexicans decide to emigrate, those are not the main reasons why the Highly Educated Mexicans based in the Czech Republic decided to emigrate from their country of origin.

2.2 Methodology

“Brain Drain in Mexico” Diploma Thesis is an exploratory research. The methodological approach chosen for this study was the Mixed Research Method since it provides the opportunity to develop a more completed research that integrates the quantitative and also the qualitative research.

The **Literature Review** chapter is composed of secondary data collected by using the Documentary Research Method. For the data collection were taken advantage of tools such as books, thesis, articles, news, government publications, and official statistical information in order to summarize the existing knowledge about the topic and so to fully understand the importance of this research. The Literature Review will introduce relevant knowledge regarding appropriate terminology about the brain drain phenomena; secondly, it is presented an overview regarding migration since this is the phenomenon from which the brain drain detaches, as well as its definition, its current situation internationally, regionally for the Americas, and locally focusing on the Mexican migration.

These are followed by an overview of brain drain including causes and impacts, critics and opinions, and the current conditions of this phenomenon globally, regional in the American continent, and one more time adding the specific situation in Mexico. Subsequently, it is presented a recapitulation of National Education System in Mexico and Mexico’s investment in education. Lastly, it is introduced the current situation in the Czech Republic regarding immigration policies, foreigners in the country, Mexicans in the Czech Republic, and the services, business, and organizations conformed by the Mexican community in the country.

In order to achieve the **First Practical Part**, in which are going to be identified and analyzed the main reasons that needled the Highly Educated Mexicans to decide to emigrate, was decided to work with primary data acquired by the Primary Research Method. Was developed a survey as a designated tool for gathering and compiling the information pretending to obtain an average result of the selected audience. The type of survey selected for this study is the Cross-Sectional Survey, the survey contains a total of 21 questions and was designed in an on-line format using Google Forms which is an app offered by Google.

On December 1st, 2020, the online survey developed for this research was opened and sent to the target population, the utilized channel of diffusion was the social network Facebook with groups such as Mexicans in the Czech Republic, Mexicans in Prague, Mexican Women in the Czech Republic and Club Mexico CZ. These are where it's possible to get in touch with the majority of the Mexican community who live in the country. Besides the various posts made in Facebook groups, there were sent a total of 500 direct messages using Facebook messenger to diffuse the survey link looking for encouraging the answering through the direct contact with each person. It is worth mentioning, they were explained concerning the topic of the Diploma Thesis, the purpose of the survey, as well as they, were assured the information obtained from each of their responses would be confidential and anonymous.

Once the survey closed and having knowledge regarding the academic path and work experience of the Highly Educated Mexicans who willingly participated in this research, it was possible to make the calculations and approximate the losses Mexico faces in the branch of total public spending invested in the education of each Mexican citizen and the total of the Mexican community who participated in this research. For the **Second Practical Part** in order to make the calculations regarding the current and definitive losses for total public spending on education, was utilized secondary data, collected from official Mexican sources, this data is mentioned in the Mexico Overview chapter specifically in the 4.2 point "Mexico's investment in education".

The **Third Practical Part** is the analysis of the Mexican Migration to the Czech Republic during a 10 years' time period, specifically 2009-2019, which is the year of the most recent available data. This analysis is carried out using secondary data collected from official resources provided by the Czech Statistical Office.

3. LITERATURE REVIEW

3.1 Terminology

Along this research **Brain Drain** will be defined according to Lowell & Findlay (2001), for them the mobility of highly educated people refers to the migration of people who studied at least three or four years of additional education to get a college degree. Then, the brain drain term is used when people who have at least “university studies” do not return to their home countries. According to Cervantes & Guellec (2002) the term was coined by the British Royal Society between 1950 and early 1960 in a paper related to the scientist migration from the United Kingdom-UK. to the United States of America-USA. and Canada.

This term has been taken more importance in the last decade, scholars like Adams (1989) defined Brain Drain as the loss of vital resources without any compensation or as the decrease of intellectual or professional resources of one country due to emigration. Garcia Pires (2015) mentioned that through brain drain developing countries are losing skilled workers due to higher wages in developed countries. In accordance with Arenas (2004 p.103) the high skilled people who with the possibility of having better working conditions leave the country looking for better living conditions are considered Brain Drain.

This type of migration has caused certain controversy regarding which words should be used to define it since according to Maltos (2013) the Brain Drain term may be offensive and should be replaced for Highly Qualified Migration. For (The International Migration 1990) the correct words to define it should be Talent’s Migration, on the other hand in accordance with Staley R (1998) the words that should be used to define this phenomenon are Intellectual Exodus and lastly the concept of Qualified Manpower which according to Shuttleworth (1991) should be the correct.

There are several concepts that have arisen from this topic, starting from the point of view that states brain drain is an insulting concept Gaillard & Gaillard (1997) stated this is a positive phenomenon that should be known as International **Brain Circulation** since it benefits the global economy. On the other hand, this same concept has a different understanding for Cao (1996) for him the brain circulation comes after the period of study

and work abroad when the process ends and the person goes back to the country of origin to take the opportunities existing in it.

In the words of Borta O (2007) when the movements are characterized by a sizeable number of people but in relative equilibrium, ergo the number of people arriving or leaving is not heavily disproportionate and happens over a short period of time may be called Brain Exchange or Brain Circulation.

The concept of **Brain Gain** refers to the gains the receiving country may have in terms of human capital. In the words of (Özden & Schiff, 2006) the brain gain occurs when highly qualified people who were trained elsewhere enter into a different country and contribute to the economic growth. However, in the words of Borta O (2007) the migration of highly skilled people does not always lead to brain gain for the hosting country. According to this point of view the brain gain occurs only when a migrant finds employment precisely in the same profession, or something very similar according to the knowledge and skills the migrant already had.

As Borta O (2007) mentioned the **Brain Waste** occurs when supply and demand mismatch in the labor market in the host country. If the highly skilled migrant doesn't find work related to his previous knowledge and conversely work in something below his education level. For example, when a person with a Medical degree in the origin country emigrates and does not find the opportunity to work as a Doctor in the receiving country, and conversely that person works as a taxi driver then is when the brain waste occurs. In that situation, there are only losers, the migrant, the country of origin, and the host country.

There are cases when developing countries send people abroad, this phenomenon is called **Brain Export**, the reasons may be either to educate themselves or to export their knowledge. In most cases, as (Lowell & Findlay, 2001) stated, the reasons are to get an eventually high return in the form of earnings, more and highly skilled workers, remittances, knowledge, technology transfer, and/or investment.

Regarding the **Intellectual Diaspora Networks** (Meyer J. & Brown M; 2001) consider that during the last few years the importance of these has been growing and have been used more frequently, from their point of view these networks were created to battle the brain drain. These are networks made to create links between high qualified ex-pats and the countries or regions they are from, with the main objective to create cooperation and development for the country of origin.

3.2 Migration overview

3.2.1 International migration

According to the United Nations-UN. (2020), a migrant can be defined as any person who has moved across an international border or within a state away from the place of birth. It does not matter the person's legal status if the movement is voluntary or not, neither what the cause for the movement is nor what length the stay will last. In the words of (Özden & Schiff, 2006) the international migration has accelerated and is likely to further develop as a consequence of globalization.

As claimed by the UN. (2019) during that year there were almost 272 million international migrants worldwide (Table 1), which represented a considerable increase considering that during 2017 the number of international migrants was nearly 258 million. This amount of 272 million international migrants during 2019 represented around 3.5 percent of the total global population, from that total 48 percent were women and the number of migrant children estimated 38 million. Moreover, three out of four international migrants were workers between 20 – 64 years old. The distribution of the international migrant population during 2019 was as follows; approximately 31% of the total resided in Asia, 30% were based in Europe, 26% lived in the American continent, 10% were in Africa, and only 3% were established in Oceania.

Table 1 - International migrants, 1970-2019

Year	Number of migrants	Migrants as a % of the world's population
1970	84,460,125	2.3%
1975	90,368,010	2.2%
1980	101,983,149	2.3%
1985	113,206,691	2.3%
1990	153,011,473	2.9%
1995	161,316,895	2.8%
2000	173,588,441	2.8%
2005	191,615,574	2.9%
2010	220,781,909	3.2%
2015	248,861,296	3.4%
2019	271,642,105	3.5%

Source: UN DESA, 2008, 2019a, 2019b.

Note: The number of entities (such as States, territories and administrative regions) for which data were made available in the 2019 UN DESA Revision of International Migrant Stock was 232. In 1970, the number of entities was 135.

Source: World Migration Report 2020

In accordance with the UN. (2019) while there are people who willingly migrate, there are others who do that out of necessity, for the first time by the end of 2018 the number of people who forcibly migrated reached 70 million, this number includes 26 million refugees, 3.5 asylum seekers, and around 41 million internally displaced people. Moreover, in the words of the International Organization for Migrants-IOM (2017) during 2019 it was an estimated 50 million people under irregular migration, around 6,163 migrants (at minimum) lost their lives or went missing trying to emigrate during the very same year and on the other hand, 72,176 people returned voluntarily to the origin country.

3.2.2 Regional migration

The migration in the American continent can be divided into three main periods: the first period is until around 1950 when the countries of the entire continent were destinations for transoceanic immigration especially from Europe. The second period started around 1960 with a permanent and increasingly emigration trend began from the Latin American and the Caribbean countries to developed countries, mainly the United States, Canada, and Spain.

The last phase in accordance with the Organization of the American Continents-OAS (2011) developed over the past decades with a moderate but steady increase in intra-regional migration having countries such as Argentina, Costa Rica, Venezuela, and recently Chile as migrant-receiving countries. It is important to mention this statement refers until the last years of century XX, since then a lot has changed regarding the migration situation in the American continent especially in Venezuela and Argentina.

Based on the IOM (2020) Central America, North America, and the Caribbean had together during 2014 around 550 million inhabitants which represented only 7.2 percent of the total global population, nevertheless, this region hosted around 25 percent of all migrants around the world. During 2013 there were an estimated 53 million migrants residing in the United States and Canada and around 3 million in Mexico. During those years, almost 15 percent of the population of the USA. & Canada was foreign-born. On the other hand, around 72 percent of all the people who born in Latin America and the Caribbean who decided to emigrate decided to reside in the USA. and Canada, it is important to mention most of them were born in Mexico and Central America.

From 2003 to 2009, around 950 thousand people emigrated per year from Latin America to one of the Organization for Economic Cooperation and Development-OECD countries. The statistics show close to half of this number decided to emigrate to the United States and about one quarter to Spain. Indeed, the statistics show from all the Latin-American and Caribbean emigrant workers living in the United States and Europe, the 45 percent are born from Mexico, the Caribbean and the Andean Region each contribute close to 15 percent, Central America added 12 percent, the Southern Cone of America contributed with 8 percent and the rest 4 percent were emigrants from Canada and the United States. (OAS, 2011)

In the words of the OAS (2011) the majority of the emigrant workforce from Latin America, excepting that from South America, were living predominantly in the United States during 2008-2009. Between 80 and 90 percent of the ex-pats from the majority of Caribbean countries were living in the USA., the percentage was even higher for the Central American migrants and reached fully 99 percent for the Mexican emigrant workers. The emigrant workers from South American countries, on the other hand, were found more often living

and working in Europe, with about three quarters or more of the total emigrant number this is especially true for countries such as Argentina, Bolivia, Ecuador, Paraguay, and Uruguay.

The IOM (2020) mentioned the number of migrants from developed countries who migrate to developing countries has increased in the region during the last years. In this case, the majority of this number is composed of retirees, investors, and American or Canadian citizens descents from Latin-emigrants. Mexico hosts almost 1 million people of this type of migration. On the other hand, the growth rate of migratory flows originating from Mexico to the United States has steadily decreased. However, Mexico continues to be the principal country of origin for the immigrants entering the United States and moreover, the principal migrant country of origin in the world.

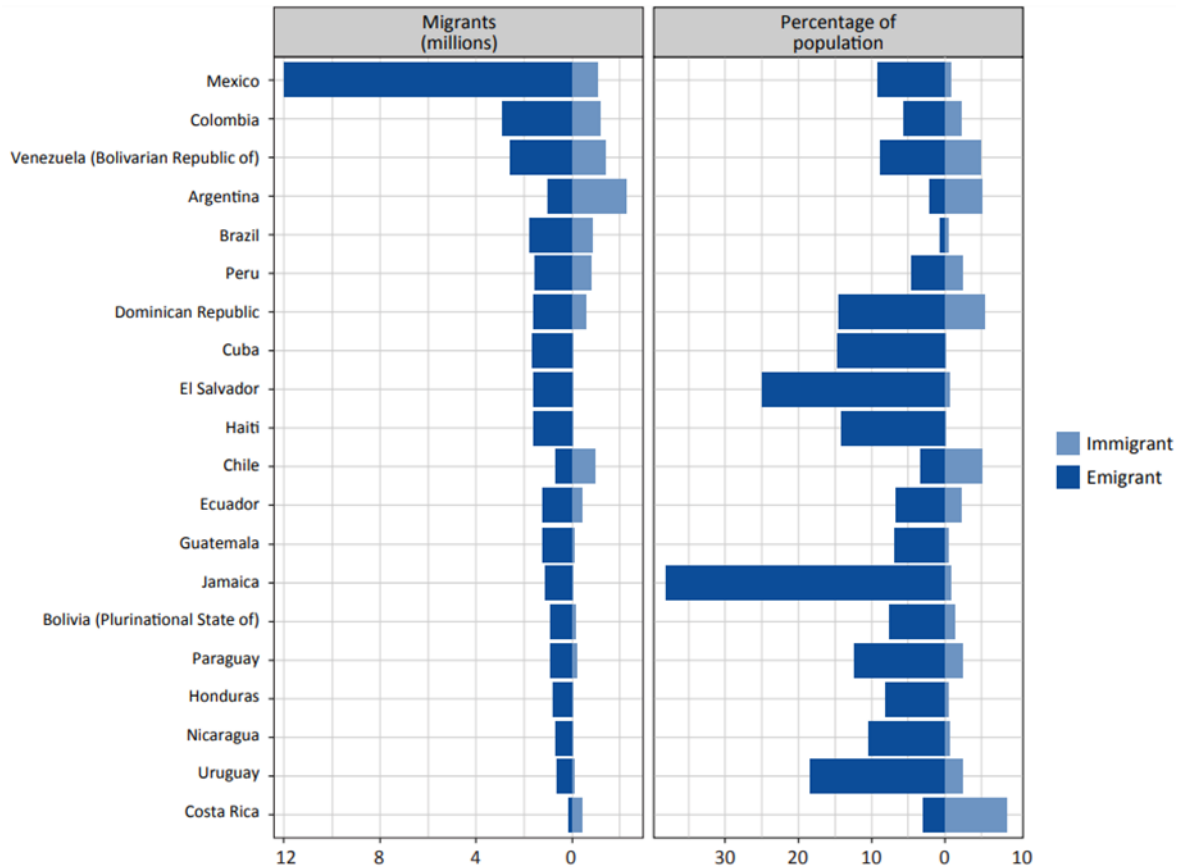
The majority of Central American emigrants consider Mexico or the United States as possibilities of having a better life. However, there are considerable migration numbers within the same Central-America region, specifically to Costa Rica. Costa Rica, Belize, and Panama have been the three major immigrant-receiving countries in Central America (Figure 1). Costa Rica and Belize receive mainly intraregional migrants from other Central American countries, on the opposite side for Panama most immigrants arrive from South America and the Caribbean, as well as Asia. Global Commission on International Migration (GCIM, 2005)

The immigration picture in South America is even more complicated, the migration to the United States, Japan, Spain, Italy, or to other European countries has been a frequent option for many people. Until 2005 Argentina was a traditional migrant-receiving country, hosting mostly immigrants from other countries within the same American continent rather than from Europe as it did in the past.

Argentina went through a four-year period in which an unprecedented number of citizens left the country looking for opportunities abroad, both within the South-American region and overseas. The same trends are observed, to a lesser degree, in other traditional migrant-destination countries such as Chile and Uruguay. By the time of this statement, Venezuela continued to be a migration destination, primarily for Colombians, and Brazil was

considered both as a significant source of and destination for migrants within the region. (GCIM, 2005).

Figure 1 - Top 20 Latin America and Caribbean migrant countries in 2019



Source: UN DESA, 2019a.

Note 1: The population size used to calculate the percentage of immigrants and emigrants is based on the UN DESA total resident population of the country, which includes foreign-born populations.

Note 2: "Immigrant" refers to foreign-born migrants residing in the country. "Emigrant" refers to people born in the country who were residing outside their country of birth in 2019.

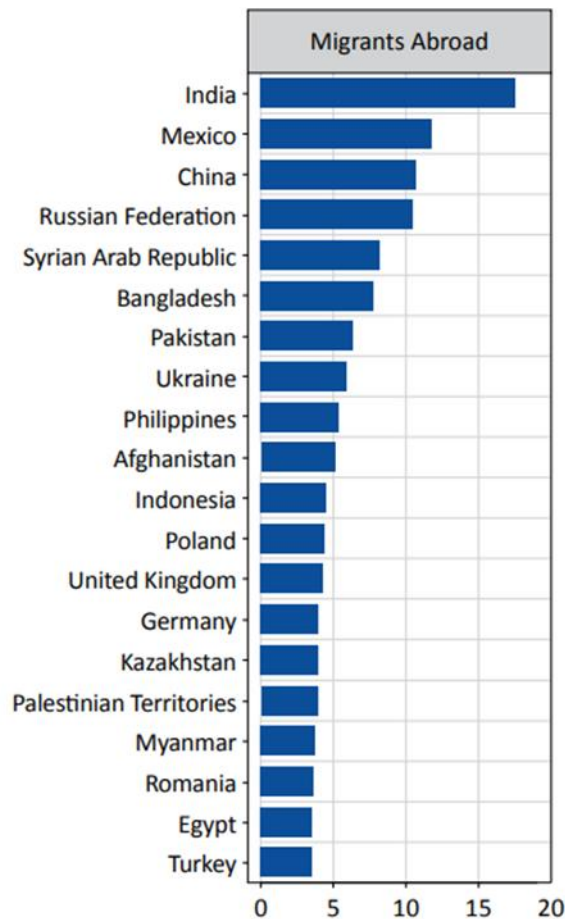
Source: World Migration Report 2020

3.2.3 Mexican migration

The migration in Mexico is marked primarily by the mass emigration to the neighbouring country (Figure 2). In the past, the migration from Mexico to the USA. was mainly circular and seasonal in most cases for labor purposes. However, in the last few years, longer stays and permanent settlements became more popular. Some of the reasons point to the fact that the Mexican emigrant families have gradually developed deeper ties to the host country and

the increase in border vigilance has made the repeated and unauthorized crossings too expensive and too risky. (GCIM, 2005)

Figure 2 - Top 20 origins of international migrants in 2019 (Millions)



Source: UN DESA, 2019a (accessed 18 September 2019).

Source: World Migration Report 2020

Mexico has seen grown its own foreign-born population which reached 408,000 people in 2000, during that year 63 percent of this number was born in the United States and the majority of this percentage were children born in the USA. of Mexican immigrants as stated by the National Population Council (CONAPO, 2001 cited by GCIM, 2005). Another characteristic that should be considered in the Mexican migration picture is the USA. citizen retirees who decided to live in Mexico which is a considerable group estimated in hundreds of thousands.

Garcia A. (2019) mentioned regarding a paper published by the Pew Research Center that for every 100 Hispanic migrants in the USA. 65% of them are Mexicans and from all the Mexicans living in the USA. nearly 79% are already American citizens. Nowadays, Mexico has turned into a transit country, the number of people crossing Mexico from Central America way to the USA. has increased in a way that now the amount of Central-Americans is bigger than the number of Mexicans looking for better opportunities in the neighboring country.

In the words of Galindo J. (2019) Mexico can be also considered a migrant-receiving country, in most cases for temporary terms since Mexico is an obligated route for those who wish to arrive in the USA.. Moreover, only 2 out of 10 immigrants from Central and South America consider the possibility to stay for long terms in the Mexican Territory. It worth mentioning according to Prieto, R. (2019) 3 out of 4 migrants who live in Mexico are from the northern neighboring country and most of them live in the border states from the north.

According to Forbes Mexico (2017), data collected from the National Survey of Occupation and Employment show the emigration rate increased from 34.3% to 36.2% per 10,000 inhabitants between 2010 and 2015. Prieto, R. (2019), who cited the National Institute of Statistics Geography and Informatics- INEGI, mention the main reasons for migrating for the Mexicans are: family reasons (such as reuniting with a relative or get married) with a 48%, reasons related to work are the 30%, study reasons with 7%, reasons related to the fear of violence 3% and others reasons get the rest 12%. According to the INEGI the most common destinations for Mexican citizens to emigrate are the USA. 86%, Canada 2.2%, and Spain 2.1%.

On a report of the Mexican government accomplished by the Institute of Mexicans Abroad (2018) the most recent census with data of 2018 shows there are 36,974,000 Mexicans living in the USA.. The majority of these are established mainly in Los Angeles, CA.; Houston TX.; Phoenix, AZ.; Chicago, ILL. and San Antonio, TX. The same report shows there are 128, 480 Mexicans living in Canada from that number 46,050 are students. On the other hand, in the south pole of the American continent, there are 8,975 Mexicans living in Chile, and the number of Mexicans residing in Argentina goes to 7,828.

According to the same report Spain is by far the country with more Mexicans registered in the European continent with a total of 56,811 established primarily in cities like Madrid, Barcelona, and Malaga. In second place comes Germany with 17,504 Mexicans and the third place it's for the UK. with 16,000 Mexicans established mainly in London, Manchester, and Edinburg. The data exposes in the Netherlands there are living 6,945 Mexicans, in France 4,513, in Italy 4,517, and in Switzerland, there are 3,212 Mexican citizens located predominantly in Zurich, Vaud, and Ginevra.

The last European country that will be mentioned in this paper is Sweden where are register 3,023 Mexicans located especially in Stockholm, Gothenburg, and Malmö – Lund. Those are the European countries that reached the minimum amount of three thousand Mexicans registered as living in the country to decide to mention it.

Under the same report, China is the country with more Mexicans registered in the Asian continent with a total of 3,727, the majority of them live in cities like Guangzhou, Taiwan, Hong Kong, Shanghai, and Beijing. Last but not least in the Oceania continent Australia is the country with more Mexicans registered with 6,770 most of them live in Sidney, Melbourne, and Brisbane.

3.3 Brain Drain overview

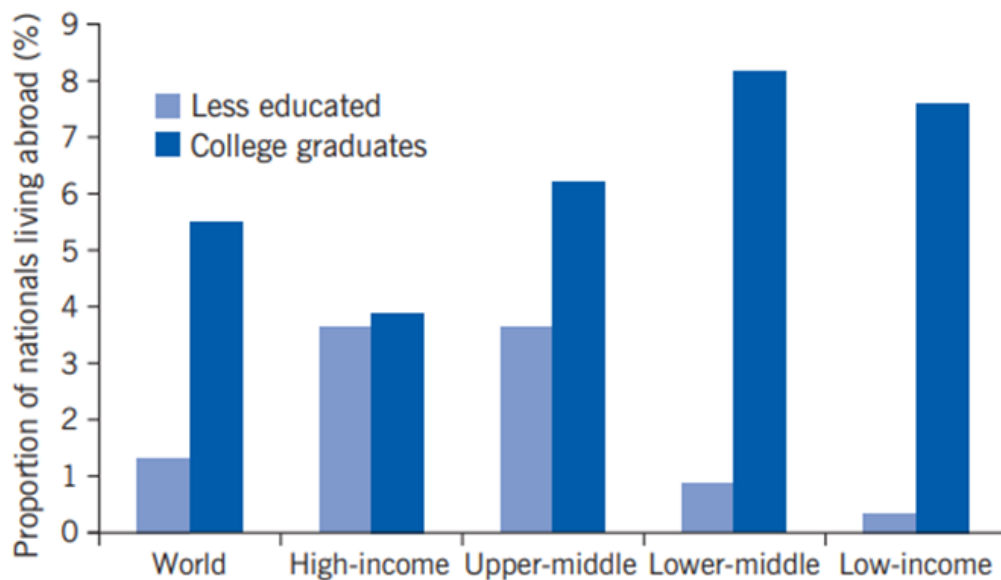
3.3.1 Reasons for Brain Drain

According to Castañoz-Lomnitz H. (2004) the highly skilled people have different reasons to emigrate between those reasons are the fact of finding scholarships to study abroad. Having family or friends in the hosting country in addition to the idea of how easy would be to integrate with the new society also influence those decisions. Adding to those reasons the individual perception of the possibilities that offer Mexico in comparison to the hosting country to develop and achieve a better economic, professional, and social life. Other important factors may be the economic and political situation in the countries of origin and, lastly, other huge motivation as important as the economic situation which is the social prestigious.

The Sociological Theory by the United Nations Educational Scientific and Cultural Organization (UNESCO, 1982 cited by Castañoz-Lomnitz H. 2004) tends to assume there are factors that repel the migrant from his place of origin (push) and others that attract him to the place of destination (pull). The main conditioning factors of the brain drain according to the push-pull theory are mainly the economic factors, political factors, institutional factors, personal factors, and the social networks.

In the words of OECD (2002) The reasons for the highly skilled people to emigrate are for example considering the economic opportunities abroad are better than those existing at the origin country (Figure 3), in addition to the migration policies in the destination country. For the highly skilled people who emigrate for intellectual reasons, factors such as the quality of education, research, language training, the support for research as well as the demand for research and development staff become important. Among the highly educated people who emigrate with entrepreneurially-minded, the reasons may include how well is the innovation environment in general for business start-ups and for self-employment.

Figure 3 - Brain Drain Rates decrease with economic development



Source: Docquier, 2014

The paper “International Mobility of the Highly Skilled” by the OECD (2002) states some of the reasons to emigrate for the highly educated people are mainly the sentimental partners, the studies, job transfers or job opportunities, in addition to the unemployment or poverty in the native country.

According to Prieto, R. (2019) the reasons to emigrate may be many such as unemployment, fear of crime, lack of opportunities, to study, the lack of religious, political, or sexual preference freedom. The migrants look for a more attractive place with more jobs, more freedoms, more security, more stability, and a better quality of life. He also mentions a fundamental factor in choosing a destination over all the others is to have some link with the new place, usually, it is an acquaintance in the place that provides information.

3.3.2 Brain Drain impacts

There is an extensive discussion around the brain drain concept, there are many scholars who agree this phenomenon brings more positive impacts but, on the other side, there are also many scholars who state the negative impacts of brain drain are more. Among the academics who think about **Brain Drain as a positive phenomenon** we can mention Özden & Schiff (2006) who express that highly qualified migration can be the origin of brain gain in the origin country by increasing the average education level. They explain the highly skilled migrants may be seen as a motivation to their friends or relatives, as an example that with good education you can get better opportunities and get access to a better quality of life.

For Rapoport (2002) the positive feedback brain drain may have are the remittances, the knowledge, and the skills acquired abroad once the highly educated migrants return to their home country. Moreover, through business, chambers, and trade networks which are also known as Diaspora Externality, it is possible to create beneficial effects in the migrant-sending country. In the words of (Borta O, 2007) brain drain may be a positive event by increasing inflows of foreign currency through remittances; nevertheless, most of the benefits discussed in the existing literature can be only achieved in long term, and just if the sending country invests in areas such as science, technology, infrastructure, and the development of the opportunities.

On the other hand, there are many experts who see the **Brain Drain as a negative event**, for example Mountford (1997) linked the migration of highly educated people with the consequence of the human capital remain low in the origin country. In his words, the developed countries are more attractive for the highly educated people, this migration originates an increase in productivity of the host countries at the expense of the countries of origin which send their best people. Chorafas (1970 cited by Özden, Ç. & Schiff, M. 2006) affirmed the loss of intelligence and business capacity at any industrial or scientific field generated by the migration of highly educated people, is a substantial loss for the economy of the country of origin.

Clark C. & Trejo (2003 cited by Özden, Ç. & Schiff, M. 2006) express the international migration of highly educated people is an issue of vital importance for middle- and low-income countries since their share of tertiary educated people remain low. For Lowell & Findlay (2001) the negative impacts of brain drain usually occur in form of a decrease in economic growth created as a result of the loss in return on educational investments in the origin country. Furthermore, the negative impacts of this migration are reinforced with the lack of feedback that occurs when too many highly educated people migrate which origins a lack of remittances, technology transfer, investments, and trade.

In the words of Borta, O. (2007) the knowledge and skills of people constitute capital, when the highly skilled people decide to emigrate from the country where they were educated and trained, that capital also leaves. For the country of origin, its previous investment into the education and training of the highly educated emigrant has been useless spending which will not bear results. Indeed, in accordance with Rapoport (2002) the purpose of the highly educated migrants is usually not to send money back home, in form of remittances, they emigrate abroad on a permanent basis with the idea of do not return to their home country.

In the opinion of many authors (Lucas, 1988; Bhagwati & Hamada, 1974; Piketty, 1997) the highly educated people who emigrated will leave a vacant place which probably will be replaced by individuals with a lower level of education and skills. This process may create a lack of well capable people who may work in really specialized work positions in the migrant-sending country.

3.3.3 Global Brain Drain

In the words of Özden, Ç. & Schiff, M. (2006) the majority of highly skilled workers go to industrial countries. According to the United Nations (2002 cited by Özden, Ç. & Schiff, M. 2006), the migration to developed countries represented 53 percent of the total world migration in 1990 and increased to 60 percent in 2000. Nearly 90 percent of the highly skilled migrants from non-OECD countries live in 1 of the 30 member states countries. On the other hand, more than 85 percent of all the OECD skilled immigrants are concentrated in six countries, almost 50 percent reside in the United States, 13.4 percent in Canada, 7.5 percent in Australia, 6.2 percent in the United Kingdom, 4.9 percent in Germany and 3 percent in France.

In the opinion of Özden, Ç. & Schiff, M. (2006) the number of tertiary-educated migrants (high-school and upper education) has increased by about 800,000 per year during the 1990 decade. During the 90's decade, only 11.3 percent of the total emigrants had tertiary education while in 2000 the highly skilled immigrants represented 34.6 percent of the OECD immigration stock. The brain drain is a problem not only for developing countries, industrial countries such as Canada, the United Kingdom, and Germany also have an important fraction of highly skilled people working abroad.

The highest average rates of emigration are observed in middle-income countries. As they explain the reason is linked to the fact in high-income countries there are fewer incentives to emigrate and in low-income countries is harder to have the liquidity necessary to emigrate. The most affected continent regarding highly qualified migration is Africa with 10.4 percent, Oceania and Europe manage a rate of about 7 percent (this data includes the migration between European countries), Asia represents 5.5 percent and America has 3.3 percent. (Özden, Ç. & Schiff, M. 2006)

In absolute terms, the most affected countries by the brain drain are the Philippines (1.136 million), India (1.037 million), Mexico (0.922 million), China (0.816 million), and Vietnam (0.506 million). On the other hand, in relative terms, the small countries are the most affected, countries like Guyana, Jamaica, Haiti, Grenada, and St. Vincent and the Grenadines the emigration rate can exceed 80 percent. (Özden, Ç. & Schiff, M. 2006)

According to Özden, Ç. & Schiff, M. (2006) in countries like Australia, Luxembourg, and Switzerland the immigrants represent nearly 25 percent of the labor force. According to them, the OECD states the immigrants in its member countries may be more qualified than the natives; this is especially true in countries where the quality of education remains low, in countries like Mexico, the Republic of Korea, the Democratic People's Republic of Korea, Greece, Turkey, Italy, and Ireland. This may be also true in countries where the immigration policy relies on a "points system", for example in Australia, Canada, New Zealand, and the United Kingdom. However, in highly educated countries like the United States, France, Belgium, and Austria, immigrants usually are less educated than natives.

The OAS (2011) explained for many American countries the number of migrants with tertiary education exceeds the migration number of those with less than upper secondary education. According to this institution, this is especially true for expatriate women workers from the Caribbean countries from which more than 40% have a tertiary education. The same phenomenon is perceived with expatriates from other countries such as Panama, Venezuela, Argentina, Chile, Canada, and the United States which have emigrant workers with a high level of qualification.

According to GCIM (2005) the high levels of emigration according to their small populations have made the brain drain an issue of particular relevance to many countries in the Caribe. In the words of Suro and Lowell (2002) one-third of the Caribbean's college-educated citizens live in the United States while Mexico and South America manage under ten and five percent respectively. Moreover, Jamaica and Haiti have two-thirds of their college graduates abroad, giving them one of the highest rates of highly skilled migration in the world.

3.3.4 Mexican Brain Drain

The USA. is the main importer of Mexican scientists, technologists, and knowledge developers. It is estimated between 1945-1970 nearly 30 000 to 40 000 Mexicans, most of them from the medium-high socioeconomic class, got graduated in the USA. and around 7 000 in France. During 1965 the Mexican economic loss due to the concept of educational investment in professionals and technicians who decided to stay in the USA. was 2 million dollars per year at that time, today the loss would be valued in much more. It has to consider that in addition to the loss invested in the training of those human resources, is an added loss of talent and creativity in many sectors of the Mexican economy. Pan American Health Organization (OPS, 1966 cited by Castañoz-Lomnitz H, 2004)

At the beginning of the 1980s, the Coordination of Scientific Research of the National Autonomous University of Mexico-UNAM confirmed more than 400 high-level academics dropped out of the institution in 5 years. The National Council of Science and Technology-CONACYT pointed out the average loss corresponding to this period was 80 000 dollars per Doctor of Philosophy- Ph.D. student who did not arrive back in the country after finishing the studies. This situation meant a total loss of 32 million dollars for the UNAM without taking into consideration what the country invested in all their previous educational background and the continuous loss by not having their teaching contribution, scientific and technological creativity. (Castañoz-Lomnitz H, 2004)

Since the institution was created more than 100 000 scholarships have been granted. When the student receives a scholarship gets a minimum amount of 1,000 dollars per month plus tuition fees, medical insurance, travel expenses, and other fixed expenses. For a Ph.D. program that lasts 4 or 5 years, the Mexican government can invest around 200 000 dollars per student. Most of the Mexican students who compete for a scholarship lookout for prestigious universities in which just the tuition fee can go up to 27 000 dollars per year. These are universities such as The University of Texas at Austin, Leland Stanford Junior University, Cornell University, The University of Wisconsin, Harvard University, or The University of California. (CONACYT 2000 cited by Castañoz-Lomnitz H, 2004)

In the opinion of the CONACYT (2000 cited by Castañoz-Lomnitz H, 2004) with those numbers it is possible to estimate that just for the students who went to the USA. during 1980-1998 Mexico spent 330 million dollars in scholarships. Assuming 5% of the total students of that period decided to stay in the USA., it would mean the neighboring country has benefited with 83 Ph.D. elements whose training cost to Mexico 16.7 million dollars only for the doctoral program cost without considering their previous educational background cost. This is just an assumption regarding brain drain the CONACYT can make according to the number of scholarships programs provides and the costs these represents. Besides it is a fact there is not much information regarding this topic in Mexico, despite it is known in the neighboring country there are at least 250 000 Mexicans with higher education.

On a report of the Institute of Mexicans Abroad (2018) according to the most recent census with data of 2018 shows in the neighboring country, there are 6,403,000 Mexicans with high school diploma, 4,341,000 Mexicans with any kind of technical diploma, 2,048,000 Mexicans with a bachelor degree and 721,000 Mexicans with postgraduate studies. The most common areas to work for the Mexicans with higher education in the United States during 2018 were as follows: management, business, and finance with 1,349,000, professional related to their studies 1,828,000, service occupations 3,788,000, sales and related 1,448,000 and office and administrative 1,826,000 people.

4. MEXICO OVERVIEW

4.1 National Education System in Mexico

The Political Constitution of the United Mexican States (1917) in its 3rd article establishes that every individual has the right to receive education; the education will be provided by The State in any of its figures The Federation, The States, The Federal Districts and/or The Municipalities. The General Law of Education (2019) emphasizes that all the inhabitants must have the same access opportunities to the National Educational System.

The education provided by The State must be secular, therefore alien to any religious doctrine, and will be guided by the results of scientific progress. The same article also establishes all the education provided by The State must be free no matter the educational modality, including higher education. In addition, it is express the education will support scientific and technological research and will encourage the strengthening and diffusion of the Mexican culture.

In Mexico, preschool, primary, and secondary education conform the compulsory basic education. Preschool is for children between 3 and 5 years of age and it is generally taught during three years, the primary education is provided to children between the ages of 6 and 14 taught over six years of study. The secondary education has been mandatory since 1993, it is provided for three years and it is generally aimed at people between 12 and 16 years of age. People over 16 years can also study secondary education but in different modalities such as the worker's modality or adult's modality.

Upper secondary education also known as a high school in Mexico offers three different programs: The general high school, the technological high school, and technical professional education. Higher education may be provided by four different types of institutions: Universities, technological institutes, normal schools (those which educated the future professors), and technological universities. This is the educational level that provides the studies to obtain the following diplomas: university superior technician, bachelor's degree, specialty's diplomas, master's degree, and Ph.D. programs.

The State provides also initial or maternal education which serves children up to 45 days old until under four years of age, it also exists the special education system is designed for people with disabilities or either for people with outstanding abilities.

The Political Constitution and the General Law of Education state the education must consider, as a priority, the multicultural and multilingual character of Mexicans. In Mexico, according to the INEGI, cited by Information System on Educational Trends in Latin America (SITEAL, 2018) paper, the majority of the population in Mexico is "half-caste" and Spanish speakers. However, in 1995 there were 6,715,591 indigenous people with a speaking diversity of more than 80 languages and dialect variants reason why there was designed a bilingual and intercultural initial and basic education model.

In Mexico, the private education also exists, according to (Diaz E. 2020) this type of education has an important weight in the National Educational System. In her words, private education conformed to 15% of the total educational community in the country which represents 5.3 million students and almost 500,000 teachers. Private schools host 11% of the Mexican students who attend preschool, primary and secondary school. In Mexico does not matter whether the neighborhoods are rich or low-income, there are some options of private education. The reasons behind this reality are, according to her, the private schools are the only option to fill the huge gaps that exist in Mexican Public Education.

Some of the advantages private education has over public education are, for example, extended hours with extracurricular activities like sports, music, or art workshops. Another advantage is the language teaching with the most common option the English but also French or German may be included and finally the access to technology and laboratories with better quality.

4.2 Mexico's investment in Education

According to Olvera (2018) The Mexican Government allocated during that year the 17 percent of total public spending to education which is more than the OECD's average set-in 11 percent. However, this reality was not reflected in students since Mexico was the country with the lowest accumulated spending per student; Hernández (2018) mentioned Mexico allocated during 2015 an accumulated amount of 29,015 dollars per student, which represents less than a third compared to the OECD's average set on 90,561 dollars.

Marion Lloyd who is a researcher at the UNAM mentioned the comparison on the spending allocated per student between the countries is "a little bit problematic". Since Mexico has more young people than other members of the OECD dividing the amount of total spending between more people ends with them getting less money. The total spending for primary school was an amount of \$ 7,543 per student, less than a quarter of the OECD average which is \$ 32,779. (Olvera, 2018)

Gallegos (2020) citing data collected from the Public Education Secretary-SEP mentioned the distribution of the student population is one of the variables which determine the allocation of budgets. For the 2016-2017 school year, the basic education had 25,780,693 students, there were 5,128,518 in upper secondary education or high school, there were 3,762,679 in higher education, and lastly 1,209,873 in the adult education module. According to her, from the total Mexican investment in education 56% goes to basic education, 12% to upper secondary education, 23% to higher education, and 0.7% to adult education.

Gallegos (2020) mentioned the distribution of the total spending in Education based on the Federation's Expenditure Budget is as follows: From the total investment in Education, 85.6% was for just for the payment of educational payroll, 4% for scholarships, 3.2% for infrastructure expenses, 2.5% administrative support, and lastly 4.4% to "others".

Official data regarding the number of resources the Mexican Government invests per student in each level of the National Educational System are provided by the National Institute of Educational Evaluation (INEE 2017). The AR03c-A1.1 indicator exposes the total public spending per student in a given year, more specifically the indicator exhibits the average amount of resources The State allocates to the attention of a student in the schools of a given educational level.

These resources can be related to the learner directly for example via teachers' salaries or indirectly via administrative expenses. For the development of this indicator, the institute takes into consideration the total government resources assigned to a given education level divided by the enrollment attended by public schools of that level.

Below this paragraph, it is possible to observe (Table 2) which provides the prior mentioned information regarding total public spending per student according to education level. The table provides information from the period 1994-2017 presented in 2012 constant prices and converted to United States Dollars-USD when the exchange rate represented 1 USD =12.988 MXN (Mexican Pesos) according to the Official Journal of the Federation- DOF.

It is also possible to observe the average national spending per student, the national spending is the total expenditure made by The State in its three shapes the Federal, Statal and/or Municipal Government plus the sum of the private sector. It is also possible to observe the average public spending per student regardless of academic level, the public spending is the total expenditure made by The State in its three shapes without the presence of the private sector.

Table 2 - Mexico's Investment in Education

Year	National education investment per student	Public investment in education per student	Kinder garden	Primary school	Secondary school	Technical professional	Upper secondary school	Upper education
1994	\$1,244	\$1,306	\$763	\$721	\$1,314	\$1,399	\$2,417	\$5,384
1995	\$1,051	\$1,107	\$691	\$722	\$1,099	\$1,382	\$2,073	\$4,899
1996	\$1,258	\$1,153	\$818	\$748	\$1,098	\$1,379	\$1,940	\$4,394
1997	\$1,298	\$1,200	\$852	\$756	\$1,221	\$1,317	\$1,899	\$4,127
1998	\$1,440	\$1,262	\$936	\$836	\$1,337	\$1,320	\$1,922	\$4,395
1999	\$1,427	\$1,268	\$975	\$889	\$1,347	\$1,362	\$1,950	\$4,085
2000	\$1,558	\$1,392	\$995	\$903	\$1,388	\$1,401	\$2,003	\$4,464
2001	\$1,613	\$1,455	\$1,034	\$948	\$1,440	\$1,452	\$2,080	\$4,640
2002	\$1,641	\$1,497	\$1,043	\$949	\$1,453	\$1,477	\$2,109	\$4,723
2003	\$1,774	\$1,587	\$1,053	\$958	\$1,466	\$1,473	\$2,104	\$4,712
2004	\$1,792	\$1,601	\$1,057	\$956	\$1,473	\$1,456	\$2,089	\$4,668
2005	\$1,843	\$1,637	\$1,071	\$968	\$1,493	\$1,462	\$2,101	\$4,695
2006	\$1,779	\$1,590	\$1,103	\$1,004	\$1,540	\$1,510	\$2,166	\$4,849
2007	\$1,835	\$1,634	\$1,137	\$1,032	\$1,586	\$1,529	\$2,189	\$4,903
2008	\$1,845	\$1,645	\$1,145	\$1,036	\$1,600	\$1,527	\$2,182	\$4,900
2009	\$1,865	\$1,666	\$1,157	\$1,053	\$1,614	\$1,545	\$2,219	\$4,973
2010	\$1,890	\$1,691	\$1,177	\$1,069	\$1,641	\$1,558	\$2,238	\$5,015
2011	\$2,060	\$1,836	\$1,194	\$1,082	\$1,659	\$1,619	\$2,333	\$5,218
2012	\$2,025	\$1,794	\$1,193	\$1,086	\$1,663	\$1,617	\$2,325	\$5,205
2013	\$2,032	\$1,795	\$1,202	\$1,090	\$1,669	\$1,617	\$2,322	\$5,207
2014	\$2,018	\$1,790	\$1,198	\$1,091	\$1,676	\$1,612	\$2,310	\$5,184
2015	\$2,041	\$1,805	\$1,215	\$1,104	\$1,694	\$1,624	\$2,325	\$5,220
2016	\$2,052	\$1,816	\$1,222	\$1,114	\$1,708	\$1,627	\$2,336	\$5,232
2017e	\$1,993	\$1,764	\$1,191	\$1,082	\$1,662	\$1,579	\$2,273	\$5,087

e: estimated

Source: National Institute for the Educational Evaluation. (INEE, 2017)

5. CZECH REPUBLIC OVERVIEW

5.1 Immigration Policy – Czech Republic

In the words of the Ministry of the Interior of the Czech Republic-MOI (2020) the immigration has to be approached as a tool for the economic development of the country. Within the Migration Policy Principles, principle No. 4 states the national migration policy will not place obstacles to legal migration rather it will support immigration, which is beneficial for The State and the society in the long term.

Nationals of third countries exempted from the visa requirement are allowed to enter the territories of Schengen Member States and stay for tourist purposes for a period of time not exceeding three months. Any stay on the territory of the Czech Republic exceeding three months requires another kind of documentation such as short term visa for a stay of up to 90 days, long term visa for a stay of over 90 days, long term residence, or permanent residence. Among the reasons for applying for a national visa or residence permit are studies, scientific research, seeking employment, work visa, business, investment, family reunification, sports, or culture.

5.1.1 Foreigners in the Czech Republic

Since the Czech Republic was founded, the country has been improving in the immigration field and this topic has taken substantial importance. In the early 1990s, the country was considering a migrant-sending country; however, since the beginning of the 21st century, the country has become a migrant-receiving country for work and business reasons. During 1993 there were just below 80,000 foreigners staying in Czech territory, twenty-six years later in 2019, the number of foreign nationals in the country increased more than 7 times that number. (MOI, 2020)

Since then, the Czech Republic has rapidly transitioned from being an emigration country to be one gaining popularity as an option to emigrate. In most cases, a significant number of newcomers' immigrants tend to settle in big cities, and that is why is not a surprise Prague has the biggest emerging group of ex-pats in the country. Nowadays an according to a census from the (Czech Statistical Office, (2019) Czechia has more than half-million foreigners,

from more than 185 different countries. In the words of (InterNations GO, (2020) around 7% of the total country population and 14% of the total population living in the capital are foreign-born.

This data decreased a little according to the last census of the (Czech Statistical Office, 2020) taking into consideration the total population of the Czech Republic was 10 707 839 by 30 September 2020, and were 593,366 foreigners. This meant 5.54% percent of the total population was foreign-born by September 2020.

In more specific numbers the total number of immigrants in the Czech Republic was 593,366 in 2019; the three biggest communities of foreign residents are from Ukraine, Slovakia, and Vietnam but there is also a significant amount of Russian, Polish and German ex-pats. (Table 3) contains the 10 countries with more people living in Czechia and the number of citizens with residency in the country. (CZSO, 2020)

Table 3 - 10 countries with more population living in the Czech Republic

Country	Total	Residency 12+ months
Ukraine	145153	142916
Slovakia	121278	121278
Viet Nam	61910	61844
Russian Federation	38010	35735
Poland	21767	21767
Germany	21478	21478
Bulgaria	17183	17183
Romania	16824	16824
Mongolia	9844	9596
United Kingdom	8332	8332

Source: Czech Statistical Office (CZSO, 2019) Foreigners in the Czech Republic- excl. Asylum granted.

The Czech Republic is a good country for ex-pats to work, according to (InterNations, (2019) Czechia is in second place just behind Vietnam, which was chosen the first place in the Expat Insider guide. The ranking was developed with 64 different countries and compared factors related to career prospects and satisfaction, work and leisure, economy, and job security.

InterNations is an international ex-pat community that conducts different surveys each year; In accordance to InterNations the Expat Insider Survey 2019 pretends to determine the best and worst places around the world for the ex-pats to live in. The survey is based on six main criteria: quality of life, family life, ease of settling in, working abroad, personal finance and cost of living. The Czech Republic is not only an excellent place to work, but it has been ranked again among the world's best places to live in. The Expat Insider Survey 2019 sets the country in 10th place of the best places for ex-pats to live in. (Pirodsky J. 2019)

However, those are not the only rankings where the Czech Republic appears with high marks, the Quality Life Index covers different factors in six different categories such as leisure options, health & well-being, safety & security, personal happiness, travel & transportation, and digital life. The Quality Life Index 2019 set the Czech Republic in 7th place with the best quality of life among 64 different countries around the globe. Last but not least in the words of (Fergusson L. & Fergusson A. 2020) the Czech Republic ranked as the 10th best country to raise a family. The Raising a Family Index 2020 involved 35 OECD countries and valorized six different categories like safety, happiness, cost, health, education, and time.

These are just a few reasons why this country in the last years has improved its position as a migrant destination country, pulling people from different countries who later on may decide to establish definitely in Czech territories, especially in the bigs metropolis the country has, like Prague.

5.1.2 Mexicans in the Czech Republic

Mexico is a migrant-sending country especially to the United States of America; however, Mexico is also one of the 180 countries with migrants present in the Czech Republic in accordance with the Czech Statistical Office (CZSO, 2019).

According to the Institute of Mexicans Abroad (2018), which is an official institution of the Mexican Government, there are currently 723 Mexican citizens registered in the Czech Republic. It is important to notice this registration is totally optional so exists the possibility that not all the Mexicans living in Czechia are register in this database. The database is

updated each time a Mexican immigrant arrives at the Mexican Embassy located in Prague and registers as a new temporary or permanent resident. Currently, it is also possible to make this registration online, the Mexican Embassy encourages its citizens to register when they visit the Embassy whatever reason the visit would be.

In the words of Embassy of Mexico, Prague by October 2019 from the 723 Mexicans register living in the Czech Republic the majority of them were located in three of the biggest cities in the country which are Brno, Plzen, and the capital city Prague. From that amount 391 were men and 332 women, there is no information available about their ages but there is information regarding the occupations of the Mexican community living in the country. In this case, again it is optional to provide this information so, even when you registered yourself for the embassy you are not obligated to provide information about the reason for your residence in the Czech Republic.

Having this in consideration, it is possible to mention on the report of the Mexican Embassy by 2019 there were register 58 people as students, 141 people were register as professionals-employees, 5 people register as housewife, 12 people register as workers with different occupation, 5 people register as entrepreneurs and 3 people register as retired employees. On the other side in accordance with (CZSO, 2019) by December 31, 2019 there were register a total of 772 Mexican citizens living in the Czech Republic from that number 659 have a residence for more than 12 months.

Since the late 90's the (Mexican Nationality Law, 1998) allows Mexican citizens to have another nationality in addition to the Mexican, in fact, it is possible to have double (in some cases) multiple nationalities. That is why the children of one or both Mexican parents, born in the Czech Republic have the right to be considered Mexicans as well as Czechs. The Mexican citizens who marry a Czech national are also eligible to have dual citizenship under the Mexican Nationality Law.

5.1.3 Services, business and organizations

In many places there may be a negative stigma about the perception of migration, some people think that migrants arrive to "take jobs" from locals or even they are the cause of "low wages". Nevertheless, that negative stigma couldn't be more wrong since migration is a phenomenon with many positive effects. The migrants are in fact entrepreneurs, innovators, and employers, there are many pieces of research that validate these thoughts.

In accordance to Partnership for a New American Economy (2011) an analysis executed during 2011 in the United States of America regarding the country's 500 strongest companies detect that 40% of them had been founded by immigrants or their children. Just two years later during 2016 (Kerr, W. & Kerr, S. 2016) members of the Harvard Business School detected in another study that immigrants in the United States not only start more businesses than native-American but their companies are also more likely to achieve success and survive longer.

What mentioned above is a reality no matter what country is the host nor the culture, language, or what country the immigrants come from. In the case of the Czech Republic, the Mexican community doesn't stay behind and contribute to the Czech economy with different services, businesses, and organizations. Among the **services** provided by Mexican entrepreneurs, it is possible to find people who do landscaping services, dog training classes, electrical and plumbing services. Nationals who give physiotherapists services, yoga classes, singing classes, there is stylists and makeup artists, tattoo artists, it is also possible to find a big variety of artists, creators of Mexican handicrafts, dancers and musicians of Latin rhythms such as Mariachi, Cumbia or even Rap.

It is worthy to mention the majority of the services mentioned in this section can be provided in English, Spanish, and sometimes even in Czech, the idea is to cover the most possible niches.

The **business and companies** founded by Mexicans in Czech lands are inserted in different economic areas, it is possible to find photography and graphic design business, interior designs companies, as well as furniture design with maintenance and renovation service of them, transportation business, IT. business focusing in virtual reality, webpage design or

digital marketing companies. There is a Mexican bakery, Tortilla's store, Piñatas store, import stores of Mexican products some of them focus on foods and drinks, others prefer the import of Tequila and Mezcal, some others sell imported Mexican coffee. Probably the most known and popular business is the Mexican restaurants all of them with different concepts and for different market niches.

Currently, there are two main **Organizations** conformed and created by and for Mexicans: La Loteria which is a community project that organizes workshops in order to promote the Mexican culture and the Spanish language as well as provide useful information about the Czech citizenship process. The second organization is Kulturní Klinika whose mission is to provide a space for expression for contemporary artists, who seek to raise social awareness in a multicultural environment.

6. PRACTICAL PART

According to the UN. (2020), the migrant stock from Mexico to the rest of the world has been constantly increasing since 1990. The net number of migrants from and to Mexico is displayed in (Table 4) it presents the data from the year 1950 to 2020. On the other hand, it is also evident there has been an increasing number of immigrants arriving in Mexico.

Table 4 - Net number of migrants, both genders combined Mexico (Thousands)

period	Migrants	period	Migrants
1950-1955	-231,909	1985-1990	-1 835,537
1955-1960	-287,484	1990-1995	-2 018,533
1960-1965	-409,085	1995-2000	-2 296,470
1965-1970	-616,085	2000-2005	-2 206,114
1970-1975	-920,380	2005-2010	-562,404
1975-1980	-1 253,817	2010-2015	-422,477
1980-1985	-1 273,198	2015-2020 (est.)	-300,000

Source: UN. World Population Prospects, 2019

As it was expected, North America is by far the region with more Mexican migrants the reason may be due to the proximity to the country. During 1990 the number of Mexican citizens in that region was 4,316,624 by the year 2019, after almost thirty years, that number multiplied close to 2.7 times reaching the register of 11,575,509 Mexicans.

The numbers for the rest of the American continent including the Latin American and the Caribbean countries are interesting. Although during 1990 this was the second area of major importance for the Mexican migrants the increasing rate kept growing but with relatively small numbers reason why by 2019 the population in those regions was not even the double as it was 29 years before. On the other hand, there is the European continent which by the year 1990 presented a number of 32,399 Mexican citizens number, an amount that multiplied by more than 4 times, the reason why by 2019 reached a total of 132,249 persons.

The official data expose the African continent as the least popular for the Mexican migration keeping really small numbers, during 2019 there were registered a total of 564 Mexican citizens living in Africa. This represented a multiply of the initial amount of 153 of 3.69

times, despite the growth the numbers continue to be incredibly small. The biggest growth in the migration rate is presented for Oceania, a continent in which by 1990 there were 777 Mexican people based mainly in Australia or New Zealand. The rate has been increasing since then until multiplied that amount by more than 9 times reaching the number of 6760 Mexican migrants register in the continent by the year 2019.

In Asia, there has been a steady but slow growth in the Mexican migrants establish in the continent, during 1990 the official number was 2,292 by the year 2019 that number multiplied by 2.34 giving a total of 5,364. In (Table 5), It is presented the Mexican migrant stock according to the (UN, 2020) categorizing the information by 5 years periods and dividing it by continents.

Table 5 - Mexican migrant stock by continent

	1990	1995	2000	2005	2010	2015	2019
Africa	153	148	174	220	312	492	564
Asia	2,292	3,129	3,940	4,327	4,840	5,105	5,364
Europe	32,399	39,729	52,200	83,969	106,147	118,290	132,249
Latin America and the Caribbean	43,120	47,184	52,484	55,493	61,769	71,726	76,045
Northern America	4,316,624	6,858,058	9,452,861	10,672,250	12,238,357	11,723,388	11,575,509
Oceania	777	1,049	1,270	1,820	3,400	5,390	6,760

Source: United Nations (2020) – International Migrant Stock 2020

This Diploma Thesis seeks to contribute to generate knowledge and expose the current situation concerning the Mexican Brain Drain. This study focuses on the Highly Educated Mexican community-based in the Czech Republic; it's important to point out even when the Mexican migration numbers in the Czech Republic are not as high as other countries may present. It is indispensable not to exclude any information however small it may seem since all fractions may contribute to eliminating the lack of information that exists in Mexico regarding this topic.

In order to identify the main reasons which, needed the Highly Educated Mexicans to decide to emigrate, it was decided to create a survey as a tool for gathering and compiling primary data. The survey will also support determining other relevant information such as the educational background and work experience of the Highly Educated Mexican community.

6.1 Survey

For the **First Practical Part** of this research, the goal is to identify and analyze the main reasons that needed the Highly Educated Mexicans to decide to emigrate. In order to achieve this objective, it was designed a survey as a tool for gathering and compiling the information of interest looking to obtain an average result. The on-line survey consists of 21 questions, along the survey there is 7 open-ended questions, the rest 14 are closed questions divided into 9 multiple choice, 3 dichotomous questions with yes/no answers, and 2 polytomous questions with categories.

The questions are also divided into sections and some questions may be interconnected, which means one question may be considered part of more than one section. The reason for this division is to organize the data and make it easy to present the results. The categories presented in the survey are:

1. Demographic questions, in order to identify characteristics such as gender and age.
2. Educational background in Mexico, in order to identify the highest level of education, the sphere of last academic degree obtained in Mexico and years of previous work experience in Mexico.
3. Emigration reasons, this section does not need an actual explanation, it was developed in order to identify the reasons for emigrating from Mexico.
4. Location and legal status in the Czech Republic, in order to identify the location and other information about the stay of the migrant such as the length of the stay, if this has been constant or not, and lastly the legal situation.
5. Occupation in the Czech Republic, in order to identify the current occupation of the migrant, if this is related to the previous educational background, in which sphere the migrant currently develop, and the monthly average income.
6. Future plans, in order to identify the future length of stay, if there are plans to moving back to Mexico, and what are the reasons for that decision.

In order for the reader to have access to the designed survey for this research, the completed version of it including its 21 questions and the corresponding options of answers is fully displayed in point 11 “Appendix”.

7. RESULTS AND DISCUSSION

7.1 Survey Results

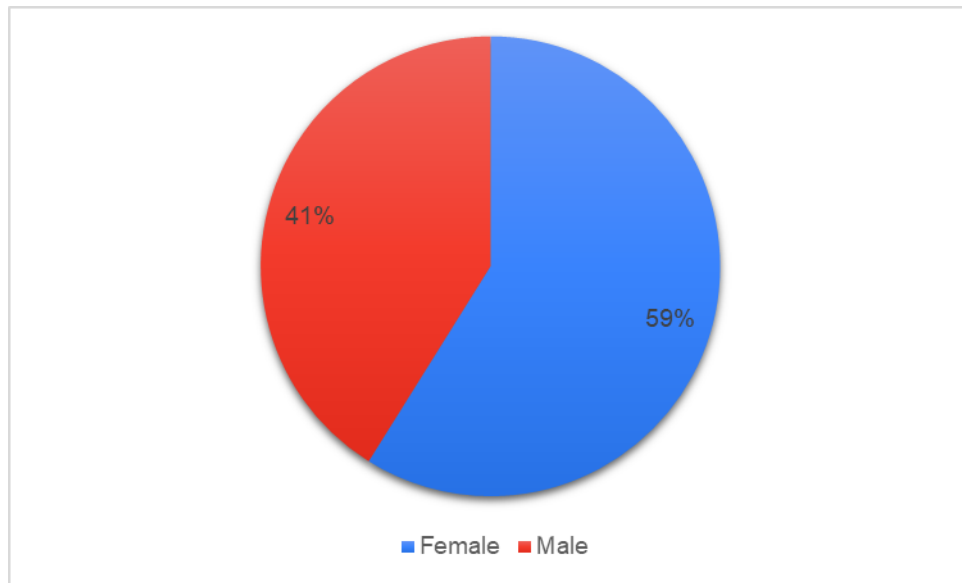
In order to obtain reliable data from this research, it was decided to work with a 95% confidence level and a margin of error of 10%. Considering the total Mexican population living in the Czech Republic is 772 people, it was necessary to achieve at least 87 people who would like to respond to the survey to shape the necessary sample.

The online survey was open on December 1st, 2020, and closed on March 1st, 2021. It was diffused through several posts on the social network Facebook using groups such as Mexicans in the Czech Republic, Mexicans in Prague, Mexican Women in the Czech Republic, and Club Mexico CZ. Besides the posts were made on Facebook Groups, there were sent a total of 500 direct messages using Facebook messenger in order to diffuse the survey link and looking for encouraging the survey answering through direct contact with each person.

Once the survey was closed a total of 90 people had answered it, this number is higher than the necessary amount of 87 people in order to obtain reliable data from this research. It is assumed the rest of the people who were contacted through the social network did not receive the message due to the message was automatically sent to the spam folder on Facebook messenger. It is also possible the people did not have the time nor interest on participating in this research, the following paragraphs are going to expose the data the survey yield question by question.

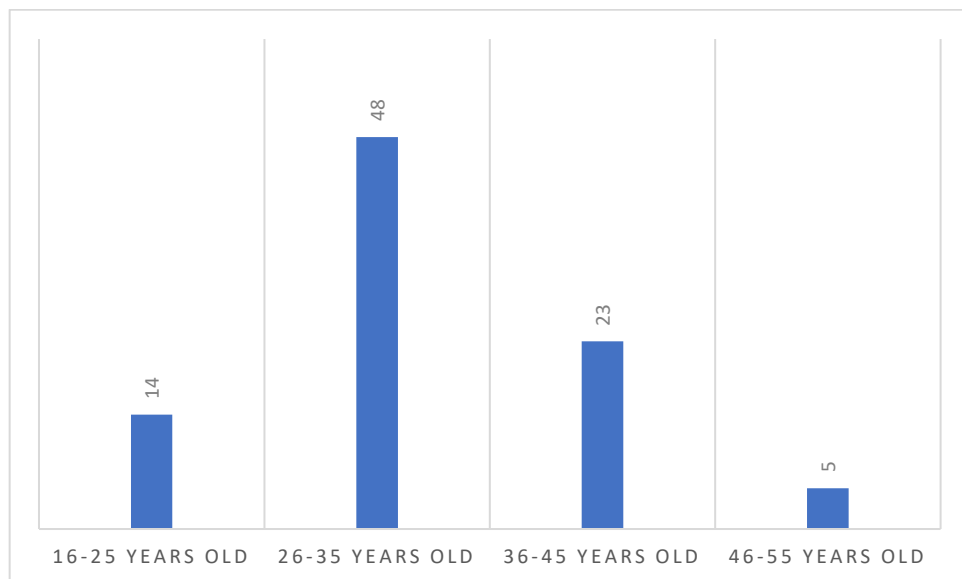
The **first question** "What gender do you identify with?" recovered the following data. The survey's data exhibits major participation from women since they were 59% of the total respondents representing 53 people. The rest 41% correspond to the Male gender, a total of 37 people identify themselves as a man. Below this paragraph (Figure 4) presents the already mentioned information in a visual form for an easier understanding of the reader.

Figure 4- Mexicans in the Czech Republic according gender



The **second question** “What is your age?” exposes there is a total of 14 people in the category of 16 - 25 years old. The majority of the Mexican people who participated in this research have between 26- 35 years old with a total of 48 Mexicans in this age range. The following category houses the age range of 36-45 years old; it is the second most populated with a total of 23 people. Lastly, the category between 46-55 years old reflects only 5 people. Below this paragraph (Figure 5) presents the already mentioned information in a visual form for an easier understanding of the reader.

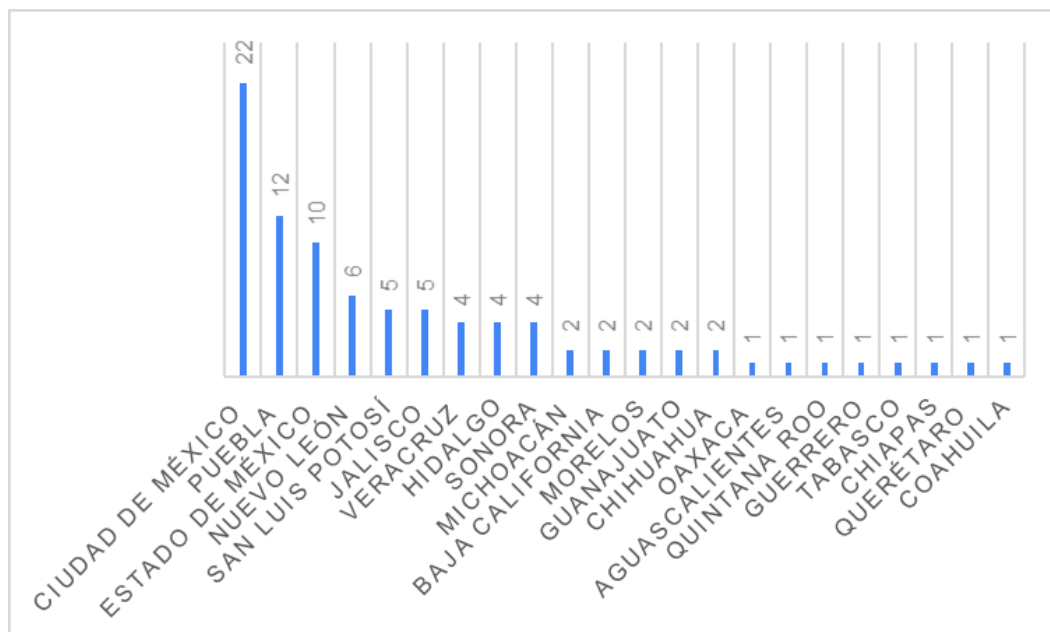
Figure 5 - Mexicans in the Czech Republic according to age



From the **third question** “From which Mexican State are you from?” The obtained data express in the Czech Republic there is Mexican nationals from 22 different states out of 32 states that Mexico as a country has. A big percentage of the Mexican population who participated in this research were born in one of the big Mexican Metropolis located in the center of the country. Most of the Mexicans living in the Czech Republic were born in Mexico City with a total of 22 people, then comes Puebla with an amount of 12 people who born there. The third state that provides more people to the sample is the State of Mexico with a total of 10 people who are currently living in Czech Lands.

The rest of the states provide fewer people to the sample, starting with Nuevo Leon state that was chosen by 6 people as their place of origin. San Luis Potosi and Jalisco were chosen as places of birth by 5 people each; Veracruz, Hidalgo, and Sonora added to the sample 4 people per state. In addition, Michoacán, Baja California, Morelos, Guanajuato, and Chihuahua were chosen as places of birth by 2 people each. Lastly Oaxaca, Aguascalientes, Quintana Roo, Guerrero, Tabasco, Chiapas, Queretaro and Coahuila are states that were chosen by only one person as place of birth. Below this paragraph (Figure 6) presents the already mentioned information in a visual form for an easier understanding of the reader.

Figure 6 - From which Mexican state are you from?

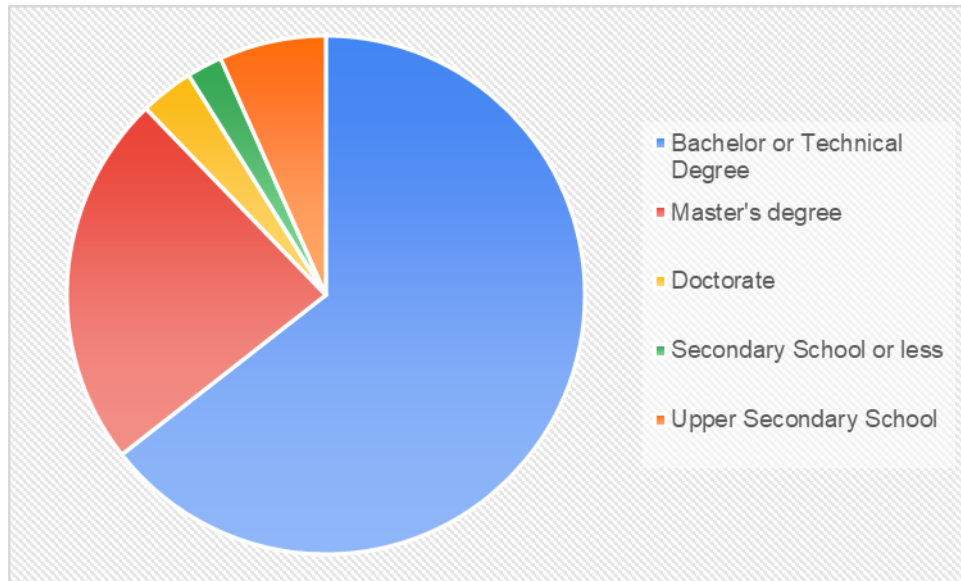


From **question 4** “What is the highest level of education you obtained in Mexico?” the recovered data display the following information. The vast majority are people with higher education, 65% of the sample obtained a bachelor or technical degree in Mexico, this percentage represents 58 people who studied and obtained a university degree from Mexican institutions. The second biggest category with 23% of the total is master’s degree, a total of 21 Mexican nationals who participated in this research studied and obtained a master's degree from Mexican universities.

The level of education doctorate constitutes 3% of the sample representing 3 people whose last academic degree studied and obtained in Mexico was this degree. The upper secondary school represents 7% of the total respondents, this percentage constitutes 6 Mexicans whose last academic degree obtained in Mexico was precisely this. Lastly, the category high school or less constitutes 2% of the total sample representing 2 people whose last academic degree obtained in Mexican territory was either secondary school, primary school, or kinder garden.

By having this information, it's possible to state that the Mexican community-based in the Czech Republic is almost entirely conformed by highly educated people who studied and were trained most of their academic path in Mexico. Nevertheless, it is important to point out the mentioned degree may or may not be the last academic degree the respondents have at the moment since there are people who decide to continue their studies abroad. Below this paragraph (Figure 7) presents the already mentioned information in a visual form for an easier understanding of the reader.

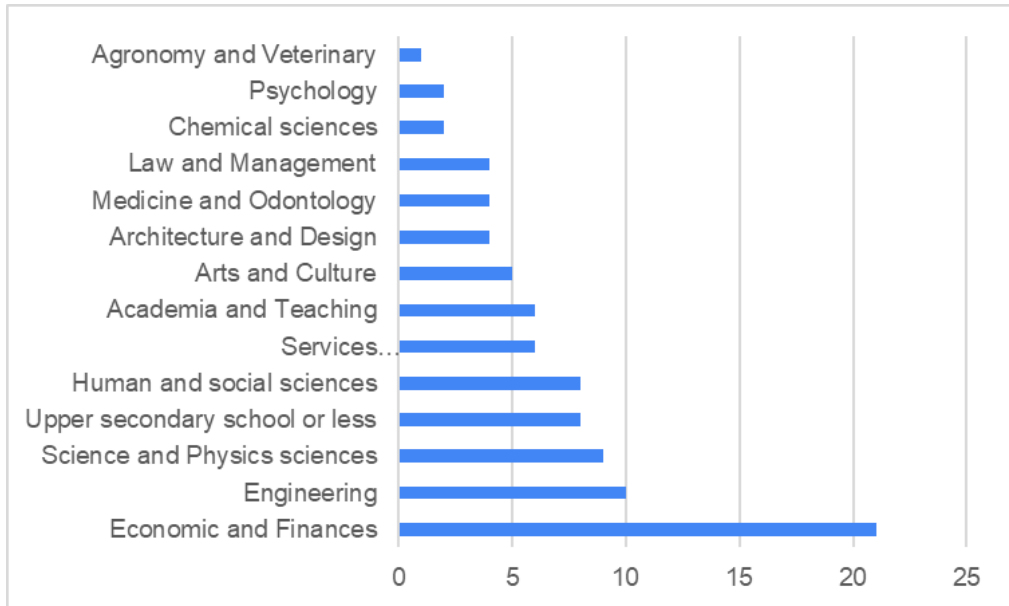
Figure 7 - Highest level of education obtained in Mexico



Question 5 “Choose the sphere of the last academic degree you obtained in Mexico” exhibits the following situation. From the total respondents, there are 21 Mexicans who studied a career related to Economics and Finance, 10 people studied one type of Engineering and 9 people studied something related to Sciences and Physics Sciences. From the total sample, 8 people studied either these two options, either until upper secondary school or a degree related to Human and Social Sciences.

The data also shows the Academia and Teaching category was chosen by 6 people as an area of study and the same situation applies to the area of services, moreover, the survey exhibits 5 people who got a degree in a career linked to the Arts and Culture. For the following categories starting for Architecture and Design, followed by Medicine and Odontology and then Law and Management, the three of them were chosen by 4 people as the sphere of their last academic degree studied in Mexico. Both Chemical Sciences and the Psychology area were chosen by 2 people respectively, lastly, the category Agronomy and Veterinary was selected by only one person as the area of the last academic degree obtained in Mexico. Below this paragraph (Figure 8) presents the already mentioned information in a visual form for an easier understanding of the reader.

Figure 8 - Sphere of the last academic degree obtained in Mexico



Question 6 “Specify the name of the last academic degree you obtained in Mexico” exposes the following scenario. A lot of different answers were received regarding the careers that were studied in Mexico by the people who answered the survey. It will not be mentioned all the degrees obtained by the Mexicans but some of them are the following:

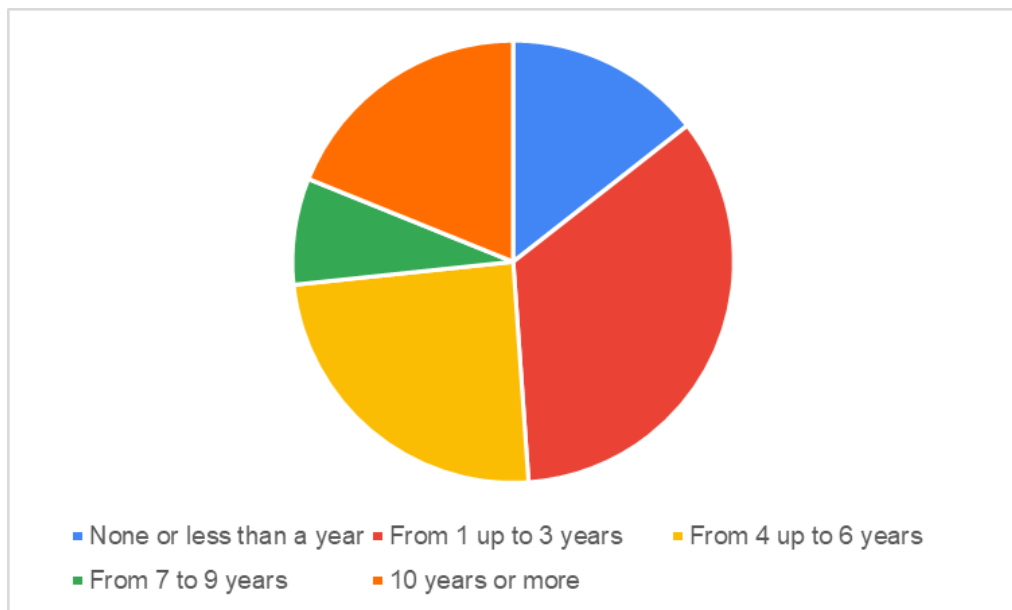
Bachelor in Biomedical Engineering, Bachelor in Environmental Engineer, Bachelor in Biochemistry Engineering, Bachelor in Industrial and Systems Engineering, Bachelor in Architecture, Bachelor in Graphic Design, Bachelor in Law, Bachelor in International Business, Bachelor in Economics and Management, Bachelor in Odontology and, lastly, Bachelor in Surgeon and Midwife. Among the Master's studies obtained by the Mexican community, it is possible to find: Master's in Science in Conservation and Use of Natural Resources, Master's in Psychology and Health, Master's in Biological Sciences, Master's in Finance, and Master's in Marketing.

From **question 7** “How many years of work experience did you already have in Mexico?” the retrieved data expose 15% of the total sample mentioned they had previous work experience in Mexico of less than a year or no experience at all, this percentage constitute 13 people. The most chosen category with 34% of the total respondents had a previous work experience in Mexico from 1 up to 3 years, this represents a total of 31 people; this is

followed by the option from 4 up to 6 years of previous work experience which constitutes 24% of the total population with a number of 22 people.

A total of 7 people chose the category from 7 to 9 years of previous work experience before emigrating from Mexico, this number represents only 8% of the total sample, being the least common. Lastly, the option 10 years or more of previous experience represents 19% of the total population, this category was chosen by 17 people who affirmed they work for at least 10 years before emigrating from their country of origin. Below this paragraph (Figure 9) presents the already mentioned information in a visual form for an easier understanding of the reader.

Figure 9 - Years of previous work experience in Mexico

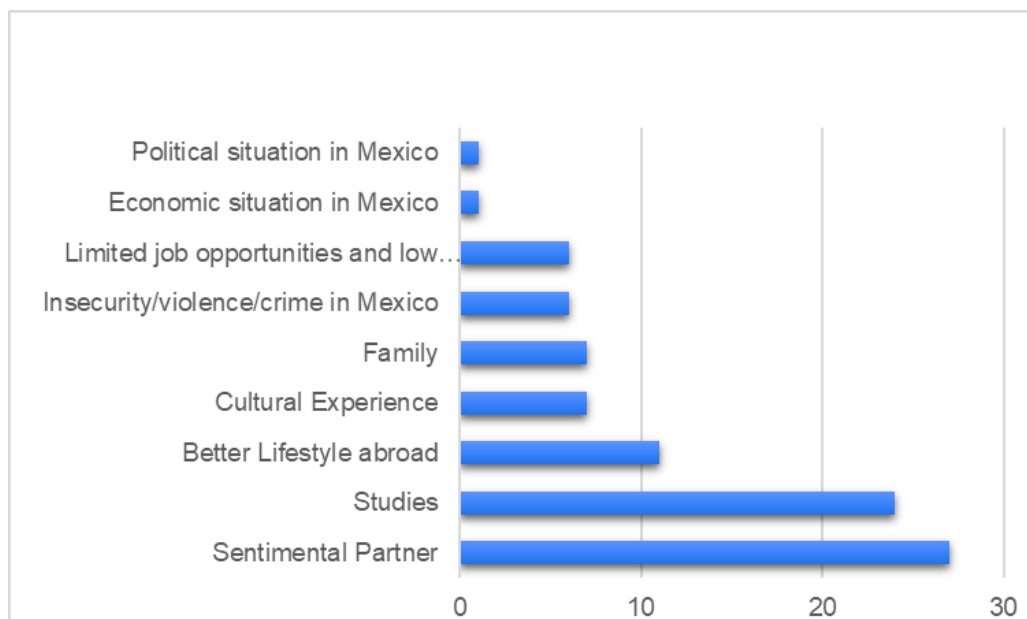


Question 8 “What were the reasons for you to emigrate from Mexico?” exposes the following scenario. For the Mexican nationals who participated in this research the most common reasons for them to decided to emigrate are mainly the following. Among the main reasons are sentimental partner, an option chosen by 27 people, and studies chosen as the reason for emigration by 24 people. The following most chosen category is better lifestyle abroad which was chosen by 11 people as the main reason for their emigration.

Both categories, both cultural experience, and family reasons were chosen by 7 people each as the reason for emigration. Both options, both insecurity/violence/crime in Mexico, and limited job opportunities and low salaries in Mexico were mentioned by 6 people each as their reasons for deciding to live abroad. Lastly, both categories, both the economic and political situation in Mexico apparently did not have a key role as a decision for emigrating since were mentioned by only 1 person each.

It is worth mentioning the data exposes only the reasons why the Mexican people who participated in this research decided to emigrate from Mexico. Nevertheless, that does not necessarily mean those are the reasons why they arrived and currently are living in the Czech Republic since they could emigrate before to another country and later arrive in the Czech Republic. Below this paragraph (Figure 10) presents the already mentioned information in a visual form for an easier understanding of the reader.

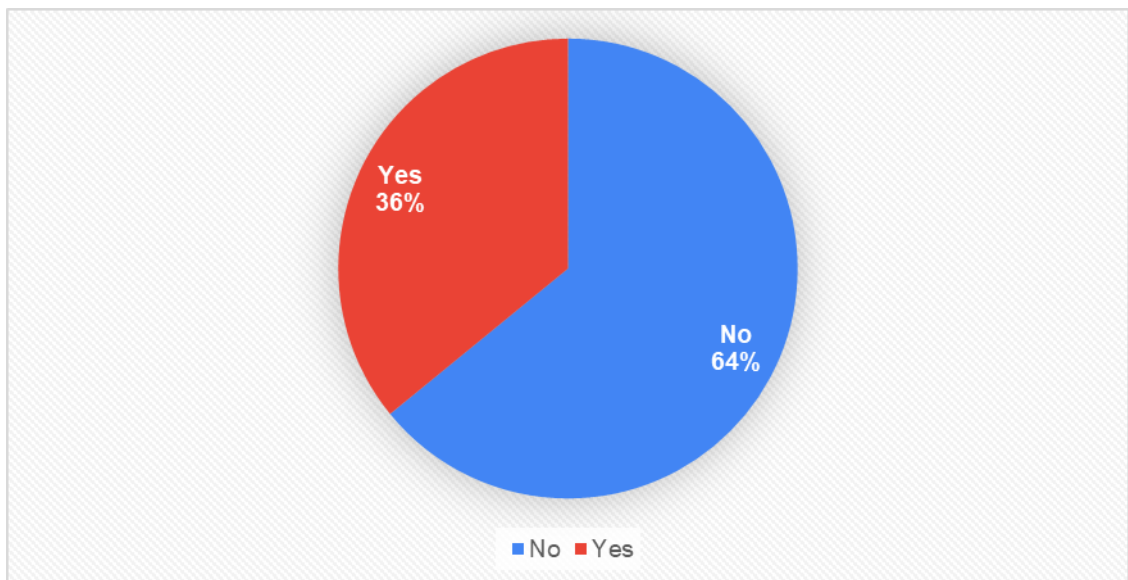
Figure 10 - Reasons for emigrate from Mexico



The following paragraphs develop the answers to **questions 9 and 10**, both questions were only answered by people who arrived in the Czech Republic as students. Question 9 “Did you arrive in the Czech Republic with a scholarship to support your studies?” exposes the 64% of the total answered negatively to the question which means there are 25 Mexicans who arrived to study in the Czech Republic with no scholarships that helped them finance their studies.

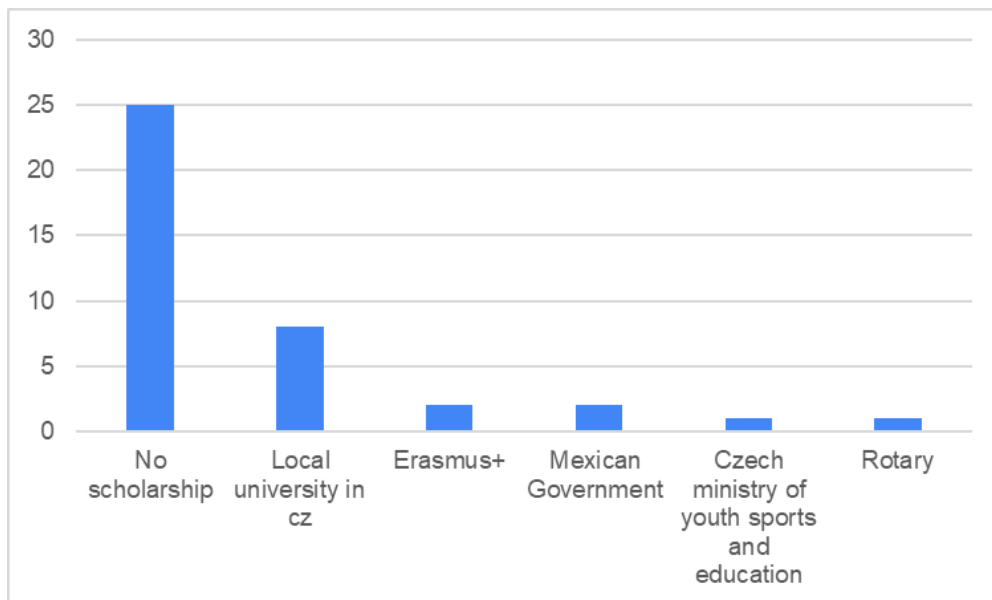
Most of the people mentioned they financed their studies mainly in the following ways. Some of them used previous savings generated in Mexico, some others used to work while they were studying in the Czech Republic and lastly, the third way of financing was using the help from their families in Mexico, whom were sending money to support them. The rest 36% of these respondents affirmed they arrived in the Czech Republic with a scholarship that helped them support their studies, this percentage represents 14 people. Below this paragraph (Figure 11) presents the already mentioned information in a visual form for an easier understanding of the reader.

Figure 11 - As a student, did you arrive with scholarship?



Question 10 “What entity supported you with the scholarship?” in this case the scenario is as follows. 8 Mexicans affirmed it was the local university in the Czech Republic that helped them to finance their studies, 2 people mentioned Erasmus+ as the institution that provided them the scholarship. The Mexican Government supported 2 people with a scholarship to study in the Czech Republic, on the other hand, the Czech Ministry of Youth Sports and Education was chosen by 1 person as the institution that provided the support and lastly, Rotary provided the scholarship to 1 person. Below this paragraph (Figure 12) presents the already mentioned information in a visual form for an easier understanding of the reader.

Figure 12 - What entity supported you with the scholarship?



From **question 11** “Where do you live in the Czech Republic?” it's possible to affirm 81% of the total Mexican community who live in the Czech Republic are located in the Capital City Prague, this percentage represents 73 people. In Brno City lives 6% of the total respondents which constitute 5 people, In Pilsen live 4% of the total sample being 4 Mexicans living there. The last 9% of the total mentioned they live in a place, not provided in the options, some of these places are Rakovník, Boskovice, Pardubice, Čelákovice, Vsetín, and Liberec. Below this paragraph (Figure 13) presents the already mentioned information in a visual form for an easier understanding of the reader.

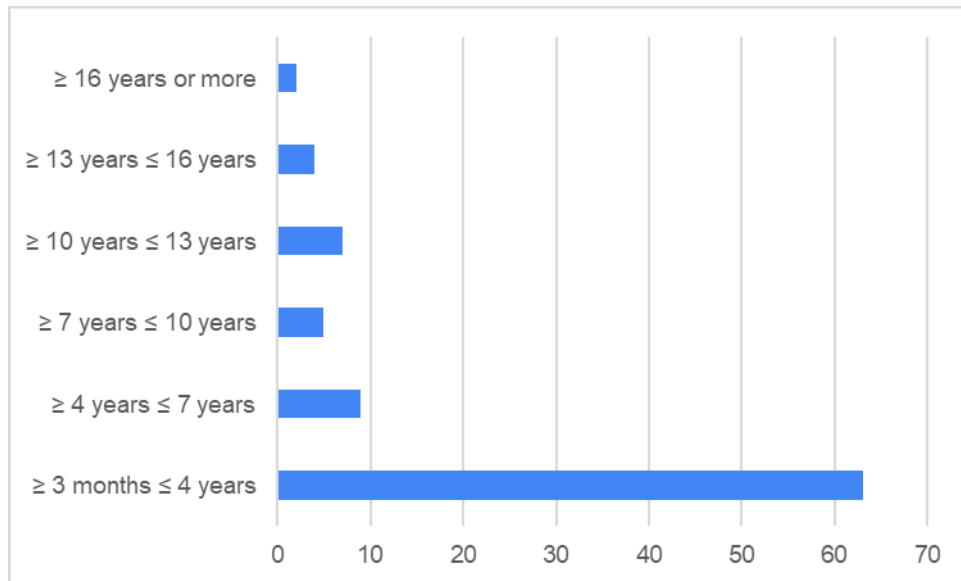
Figure 13 - Where do you live in the Czech Republic?



Question 12 “For how long have you lived in the Czech Republic?” provided the following data, there are 63 Mexican nationals who have been living in the Czech Republic for more than three months but less than 4 years. The next category includes 9 people who affirmed they have been living in the country for more than 4 years but less than 7 years, the third option was chosen by 5 Mexicans who have been based in Czechia for more than 7 years but less than 10 years.

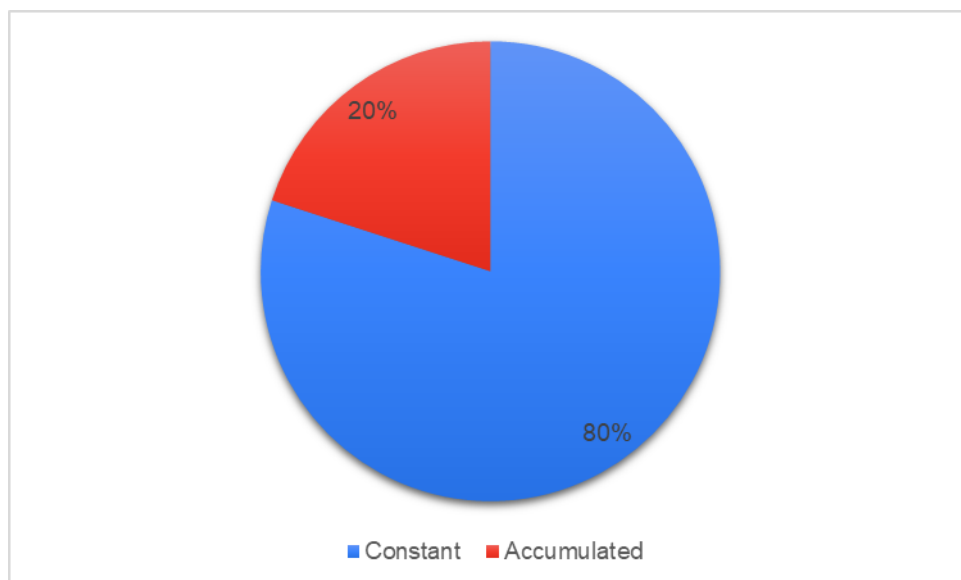
The number of Mexicans who chose the fourth option was 7 people who have been residents in this country for more than 10 years but less than 13 years. The total number of people who are considered in the next category is 4 people who stated they have been in the Czech Republic for more than 13 years but less than 16 years. Lastly, only 2 people mentioned they have been residents of the country for 16 years or more. Below this paragraph (Figure 14) presents the already mentioned information in a visual form for an easier understanding of the reader.

Figure 14 - For how long have you lived in the Czech Republic?



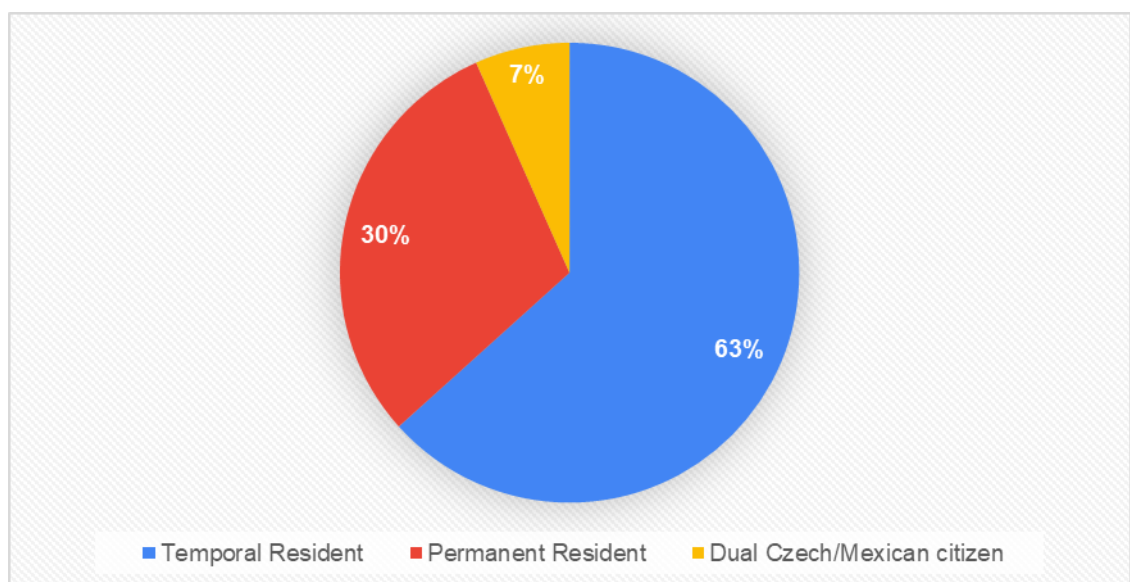
Question 13 “Has the length of your stay been constant or accumulated?” exposes that 80% of the total sample, which represents 72 people, mentioned the length of their stay in the Czech Republic has been constant. On the other side, the rest 20%, which represents 18 people, stated the length of their stay has been accumulated over the years. Below this paragraph (Figure 15) presents the already mentioned information in a visual form for an easier understanding of the reader.

Figure 15 - Has the length of your stay been constant or accumulated?



The retrieved data from **question 14** “What is your legal status in the Czech Republic?” exhibit the following scenario. 63% of the sample represents 57 people who live in the Czech Republic as temporal residents, on the other hand, 30% of the respondents include 27 people who are in the country under the legal status of permanent residents. Lastly, there is a 7% who affirm they have dual Czech/Mexican citizenship, this small percentage represents 6 people who can arrive in the country as Czech nationals’ reason why most likely they are not considered in the foreigner’s database provided by the CZSO. It is not certain either if this percentage is considered or not in the database of the Mexican nationals living in the Czech Republic provided by Mexican entities. Below this paragraph (Figure 16) presents the already mentioned information in a visual form for an easier understanding of the reader.

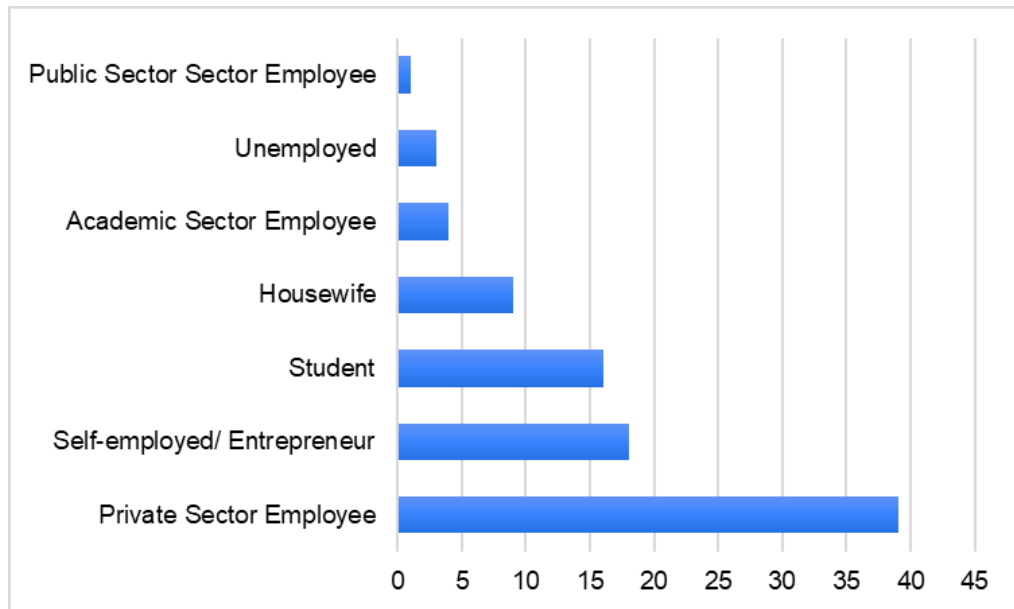
Figure 16 - What is your legal status in the Czech Republic?



From **question 15** “What is your current occupation?” It is possible to observe the majority of the Mexican community are working in the private sector, the people working in this sector are a total of 39. A total number of 18 Mexicans affirmed being self-employed or entrepreneurs, on the other hand, there is a total amount of 16 people who are currently students in the Czech Republic. From the total contestants, 9 of them mentioned they are housewife’s, in the next category 4 people affirm they are working as academic sector employee, 3 Mexican nationals mentioned currently they are part of the unemployed category and there is only one person working as public sector employee. Below this

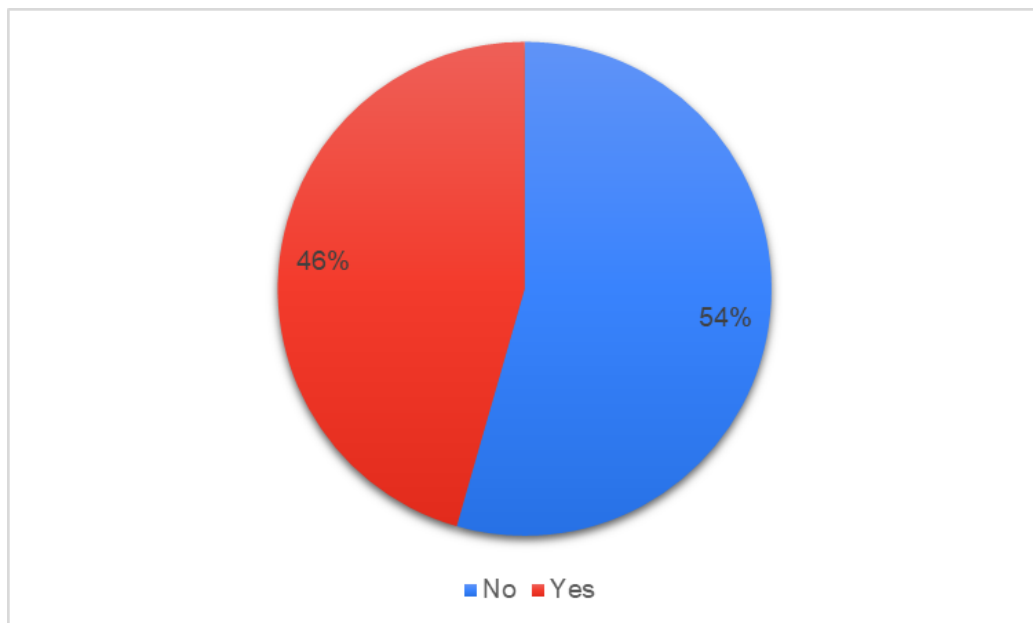
paragraph (Figure 17) presents the already mentioned information in a visual form for an easier understanding of the reader.

Figure 17 - What is your current occupation?



Question 16 “Does your occupation in the Czech Republic is in the same sphere as it was in Mexico?” exhibit the following data. 54% of the total respondents, which represents 49 people, are working in an area that is not related to their previous studies either the previous work experience they used to have in their country of origin. On the other side, the rest 46% includes 41 Mexicans who are working in the same area as they were trained for, in the same area they already had previous work experience. Below this paragraph (Figure 18) presents the already mentioned information in a visual form for an easier understanding of the reader.

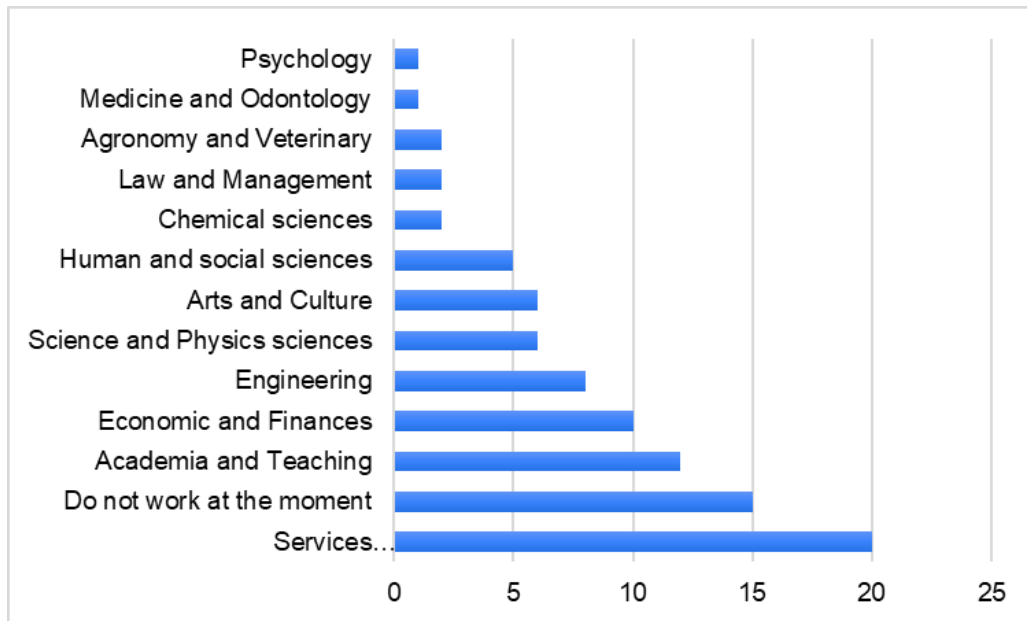
Figure 18 - Does your occupation in the Czech Republic is in the same sphere as it was in Mexico?



From **question 17** “What is the sphere of your current job in the Czech Republic?” the recuperate data shows the following situation. There is a total of 20 people working in the service area as entrepreneurs, in restaurants, or in the tourism industry, 15 people of the total respondents mentioned they are not working at the moment, they may be part of the housewife’s, unemployed or students’ categories. There are 12 Mexican nationals currently working in the sphere of Academia and Teaching, in the area of Economics and Finance are 10 people who are dedicated to this.

There are 8 Mexicans working in the sphere of Engineering and 6 people are working in the sphere of Science and Physics Sciences. From the total sample, there are 6 people who are working in something related to Arts and Culture and 5 people are working in something linked to the Human and Social Sciences. There is a number of 2 people working in each of these following three areas Chemical Sciences, Law and Management and Agronomy and Veterinary. Lastly, there is one person working in each of these two areas Medicine and Odontology and Psychology, respectively. Below this paragraph (Figure 19) presents the already mentioned information in a visual form for an easier understanding of the reader.

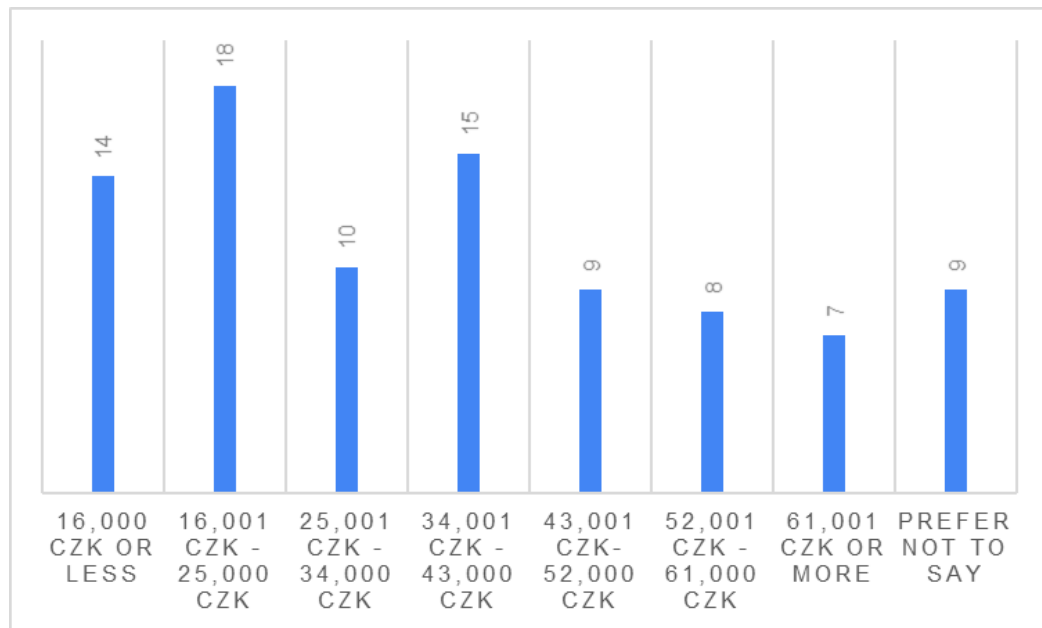
Figure 19 - What is the sphere of your current occupation in the Czech Republic?



From **question 18** “Monthly income after taxes” the retrieved data shows the following scenario. There are 14 people in the category of making monthly after taxes 16,000 CZK or less, the following was the most chosen range with 18 people who mentioned they make between 16,001 CZK - 25,000 CZK monthly after taxes. The third category is people who make between 25,001 CZK - 34,000 CZK monthly after taxes, in this range there are 10 respondents, and on the following category which is the people who make between 34,001 CZK - 43,000 CZK monthly after taxes, there are 15 Mexicans.

There are 9 Mexicans who mentioned they make between 43,001 CZK- 52,000 CZK monthly after taxes and there are 8 people who make between 52,001 CZK - 61,000 CZK. Lastly, in the range of 61,001 CZK or more monthly after taxes, there are only 7 Mexicans. On the other side, from the total of respondents, 9 people considered this question as private information and preferred not to share it. Below this paragraph (Figure 20) presents the already mentioned information in a visual form for an easier understanding of the reader.

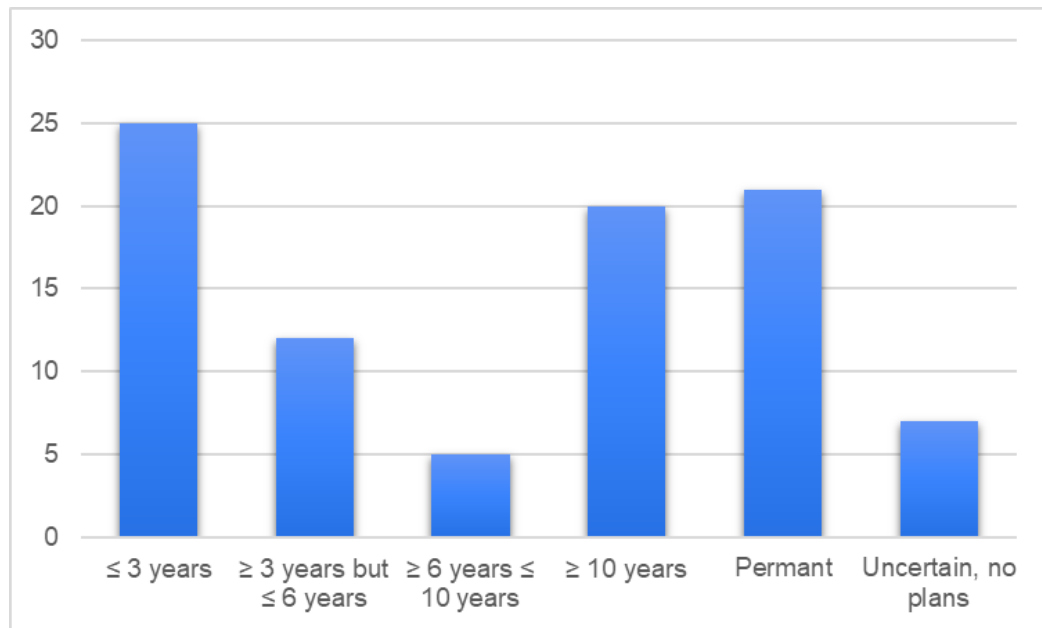
Figure 20 - What is your monthly income after taxes?



Question 19 “For how long are you planning to stay in the Czech Republic?” exposes the following data. A total of 25 Mexicans is planning to stay in the Czech Republic for less than 3 years, 12 respondents mentioned they are planning to stay in the country for more than three years but less than 6 years.

In the following range, there are 5 people considering staying in Czechia for more than 6 years but less than 10 years, 20 Mexicans mentioned they are planning to stay for more than 10 years and 21 respondents mentioned they are going to stay permanently in the country. Lastly, 7 people mentioned they are part of the uncertain, with no plan’s category, they are not sure about how long they will stay in the Czech Republic, even though they also mentioned they will stay as long as the possibilities allow them. Below this paragraph (Figure 21) presents the already mentioned information in a visual form for an easier understanding of the reader.

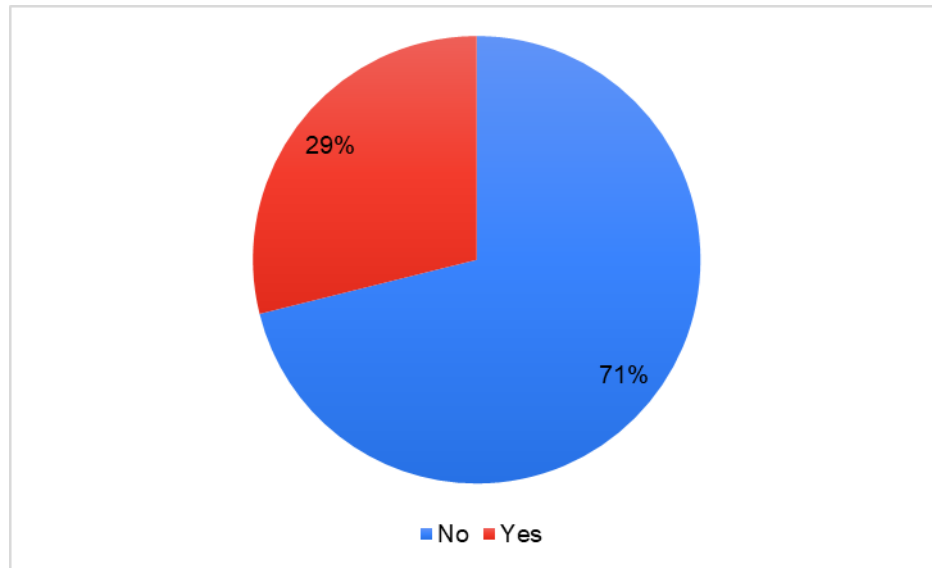
Figure 21 - For how long are you planning to stay in the Czech Republic?



The following paragraphs are going explained the results from **questions 20 and 21** “Are you considering going back and establish definitely in Mexico?” “In case your answer is affirmative; What are your motivations?” respectively. The recovered data exhibit 71% of the people who participated in this research does not want to go back and establish definitely in Mexico, this percentage represents 64 Mexicans. The rest 29% includes 26 Mexicans who answered affirmatively to the question, they mentioned they are planning to go back and establish definitely in their country of origin.

This percentage links us to question 21 “What are your motivations for going back and establish definitely in Mexico?”. Among the reasons the Mexican nationals who in the future are planning to go back to their country of origin are mainly family and friends. They also mentioned they miss the food and weather which has an influence on their mental health, some other Mexicans consider they have better job opportunities or for starting a business there. On the other hand, there are people who mentioned they want to go back for their retirement, finally, the reason for others is simply they love their country and want to help Mexico to grow. Below this paragraph (Figure 22) presents the already mentioned information regarding question 20 in a visual form for an easier understanding of the reader.

Figure 22 - Are you considering going back and establish definitely in Mexico?



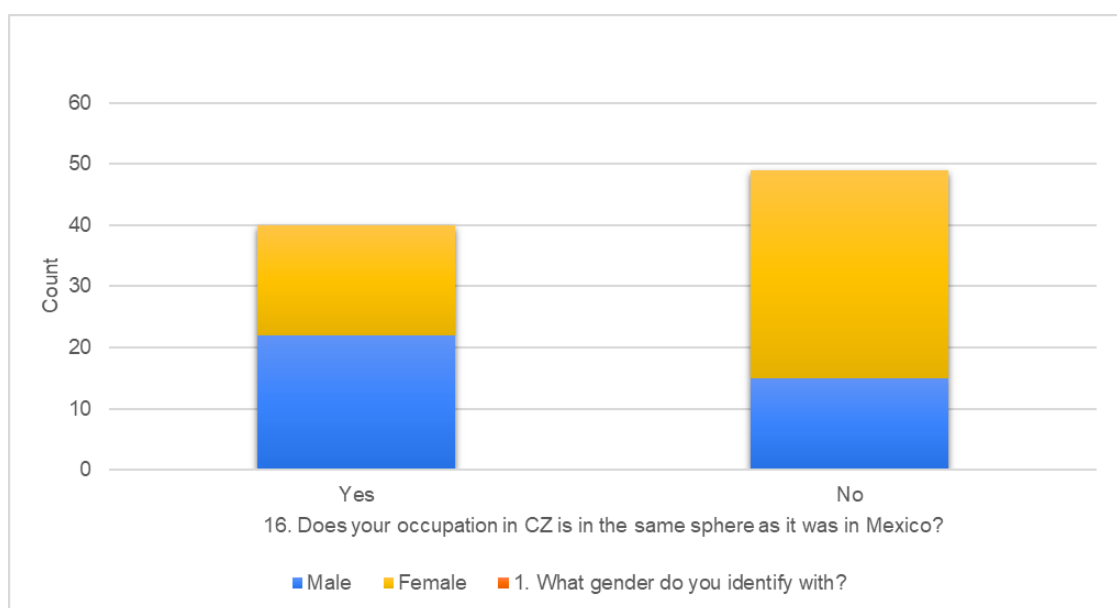
The retrieved data from the survey was deeply analyzed looking for trends or interesting data not visible at first glance and in fact, it was possible to observe some interesting points which will be developed in the following paragraphs. (Figure 23) expose the answers from question 16 “Does your occupation in the Czech Republic is in the same sphere as it was in Mexico?” connected with the answers from question 1 “What gender do you identify with?”. The recovered data expose the following scenario, from the 90 people who participated in this research, it was already known there are 49 people who are currently working in an area not related to their previous studies.

Starting from that point it is possible to visualize this amount of 49 people is constituted by a shocking majority of women, 70% of the total that represents 34 women who are currently not developing professionally in the area of their previous education obtained in Mexico. On the other side, the rest 30% represents only 15 men who at the moment are working in an area not related to their studies prior to their emigration.

Observing the information regarding the people who at the moment are working in the same area as they were trained for, it was already known there were 41 Mexicans under these conditions. By crossing the two variables it is possible to observe from that total amount, there are 22 Mexican men who are developing professionally in the area of their previous

education obtained in Mexico. On the other side, the number of Mexican women who are currently developing professionally in the same area as they were trained for in their country of origin is 19 women, it is again a smaller number than the amounts presented for Mexican men. It is not possible to affirm if these situations are related to internal factors such as the individual decision for developing in a different area of the prior education, or if the situations are influenced by external factors such as the labor market in the Czech Republic.

Figure 23 - Does your occupation in the CZ is in the same sphere as it was in Mx? Display by genders

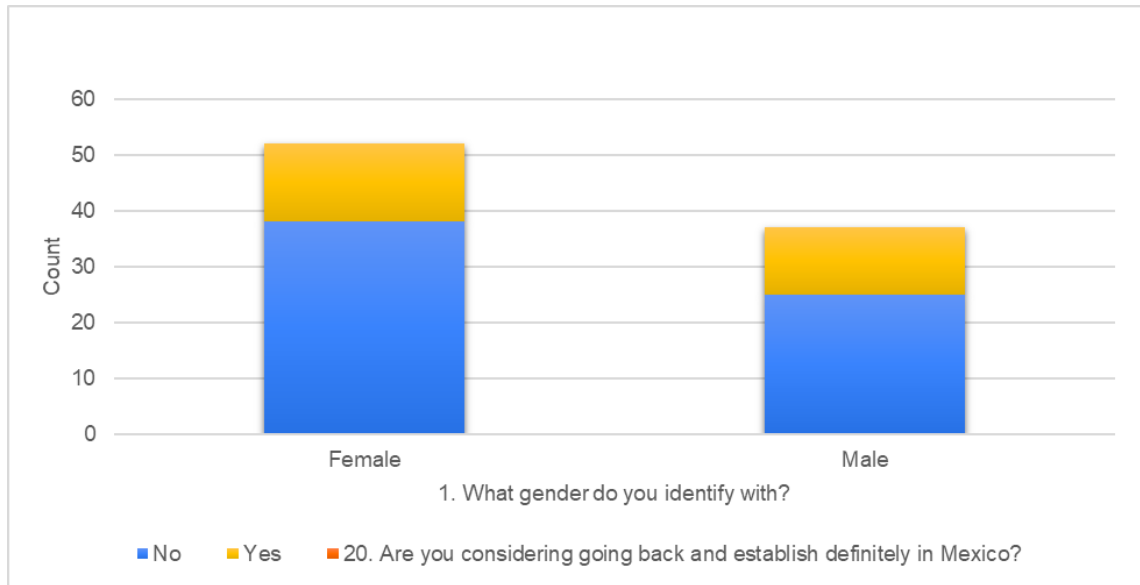


(Figure 24) exhibit answers from question 20 “Are you considering going back and establish definitely in Mexico?” interconnected with answers from question 1 “What gender do you identify with?”. The retrieved data display 53 Mexican women participated in the research, from that amount 74% constitute 39 people who affirmed they are not planning to go back and establish definitely in Mexico. On the other side, the rest 26% constitutes 14 people who answered affirmatively to the question, they are planning to go back and establish definitely in their country of origin.

Analyzing the same two variables according to the male gender exposes the following situation. From the total of 37 Mexican men who participated in this research, 32% that constitutes 12 people answered affirmatively the question, this amount of people is planning

on going back and established definitely in Mexico. On the other side, 68% that constitutes 25 people of the total amount of men affirmed they are not planning on going back to established definitely in their country of origin.

Figure 24 - Are you considering going back and establish definitely in Mexico? Display by genders



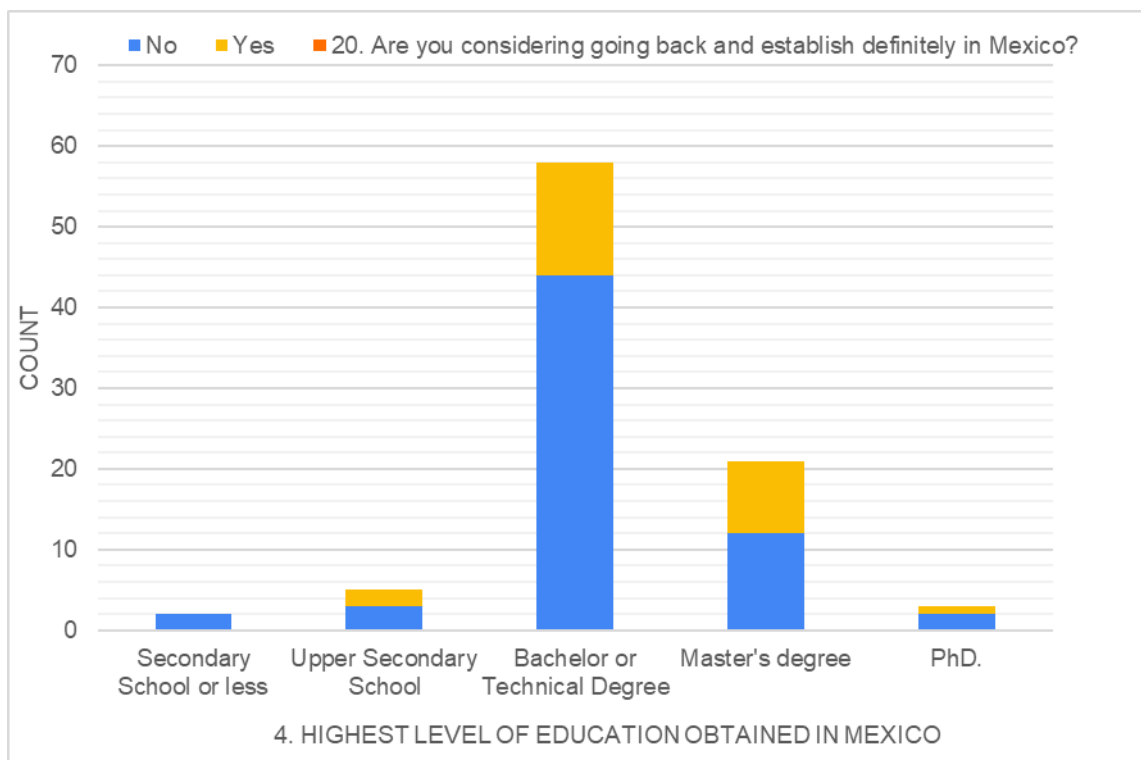
(Figure 25) display the answers from question 20 “Are you considering going back and establish definitely in Mexico?” connected with the answers from question 4 “Highest level of education obtained in Mexico”. The recovered data from the survey expose the following information. There are two people whose last academic degree obtained in Mexico was a secondary school or less, both of them are not considering going back to establish definitely in Mexico. The following category is upper secondary school as the last academic degree obtained in Mexico composed of 5 people of which 3 of them mentioned they are not planning going back to establish definitely in their country of origin.

The most populated category is constituted by 59 people whose last academic degree obtained in Mexico was either bachelor's degree or technical degree. From that total amount, 24% that constitutes 14 people answered affirmatively stating they are planning on going back to establish definitely in their country of origin. On the other side, the rest 76% that constitutes 45 people who answered negatively affirming they are not planning to go back and establish definitely in Mexico.

There is a total of 21 people whose last academic degree obtained in Mexico was a master's degree. From that number 43% constitute, 9 people who stated they are planning to go back and establish definitely in Mexico. On the other side, the rest 57% constitute 12 people who answered negatively to the question affirming they are not planning to establish in their country of origin. Lastly, the category for those whose last academic degree obtained in Mexico was a doctorate degree is constituted by 3 people. In this category, only 1 out of the 3 respondents of the group affirmed going back and establish definitely in Mexico is part of the plan.

It is possible to affirm in all the cases is possible to observe the majority of the people are planning to stay abroad, does not matter what was the last academic degree obtained in Mexico there are no special trends regarding the educational background.

Figure 25 - Are you considering going back and establish definitely in Mexico? Display by highest level of education



7.2 Losses Mexico faces due to Brain Drain

The results obtained through the surveys were used to develop this **Second Practical Part** of the Diploma Thesis, with the obtained data it was possible to have knowledge regarding the educational background of the Highly Educated Mexicans living in the Czech Republic.

Starting from the knowledge of which was the last academic degree obtained in Mexico, it was possible to trace the academic path of the respondents, which means identify how many and what educational levels the person studied in Mexico. In order to approximate the losses Mexico faces due to the brain drain to the Czech Republic, it was necessary to link the academic path of each Mexican to the total public spending per student according to each educational level. The information was obtained through the INEE and it is deeply developed on the Mexico Overview chapter point 4.2 "Mexico's investment in Education".

(Table 6) provides the total public spending invested for one academic year according to each level of education per student in 2017 presented in 2012 constant prices. Since the INEE provides the information in the national Mexican currency it was necessary to convert to USD, at that time the exchange rate represented 1 USD =12.988 MXN according to the DOF.

Table 6 - Total public spending invested according to the level of education per student in 2017

Total public spending in Education according to the level of education per student in 2017							
Currency	Kinder Garden	Primary School	Secondary School	Upper Secondary School	Bachelor	Master	Doctorate
MXN	\$15,462.80	\$14,057.09	\$21,581.77	\$29,519.90	\$66,068.34	\$66,068.34	\$66,068.34
USD	\$1,190.55	\$1,082.31	\$1,661.67	\$2,272.86	\$5,086.88	\$5,086.88	\$5,086.88

Source: Own calculations

(Table 8) presents the results of the current losses Mexico faces due to the total public spending invested in the education of the Mexicans who are currently in the Czech Republic. As was mentioned above, the first step was to identify which was the last academic degree obtained in Mexico in order to trace the academic path of each respondent, later on, it was necessary to identify how many people were in the same situation. Ergo, if the results of the surveys exhibit 58 people who obtained the bachelor degree as the last academic degree studied in Mexico, that means all those 58 people studied all the previous levels of education.

The corresponding previous education levels are mentioned in order of study, kinder garden, primary school, secondary school, and upper secondary school until reaching the university.

It is necessary to point out (Table 6) shows the total public spending invested per student according to each level of education; however, these amounts only represent the cost of one school year. Since the interest of this research is to know the total investment the government had to paid, for the totality of each level of education completed. It was necessary to multiply the total annual public spending per student of each level of education by the number of years must be taken at each level of education in order to obtain the final degree. (Table 7) presents the total public spending invested for the totality of the necessary study years to obtain the degree in each level of education per person in 2017.

Table 7 - Total public spending for the entire studies according to the level of education per student

Total public spending for the entire studies according to the level of education per student in 2017							
Currency	Kinder Garden	Primary School	Secondary School	Upper Secondary School	Bachelor	Master	Doctorate
USD	\$3,571.64	\$6,493.88	\$4,985.01	\$6,818.58	\$25,434.38	\$10,173.75	\$20,347.50

Source: Own calculations

In Mexico, the kinder garden lasts for 3 school years, followed by the primary school that lasts for 6 school years and the next level is the secondary school that lasts for 3 school years. On the other side, the duration of the upper secondary school may vary between 2 or 3 years depending on the program and the institution that imparts it, however, for the use of this research, the length of 3 years was taken as a basis.

The same situation applies to the rest of the levels of education in which the length may vary depending on the program and institutions that impart it. A bachelor's degree in Mexican territory lasts 5 school years on average, the reason why this number was considered as a basis for the research. The master's degree may last between 1-2 years, the time considered as a basis was 2 years and lastly, for the doctoral programs which may last between 3-5 years, the time considered as a basis was set in 4 years.

For example, having knowledge about the annual total public spending invested per student at the university (Table 6) which was set at 5,086.8756 USD per year during 2017, and the duration of the university in Mexico that is 5 years long. It is necessary to multiply both

amounts ($5,086.8756 * 5$) in order to obtain the total public spending invested for a person to study in its entirety and obtain a university degree. After this step, it is necessary to multiply the obtained result from the previous calculation (25, 434.3781 USD) by the number of people who did also study the same level of education and have the same educational background.

Developing the case of the people whose last academic degree obtained in Mexico was the university level which through the survey it possible to know are 58 people. The obtained data after the calculation of ($25,434.3781*58$) will be the total public spending for the bachelor studies stage, for the people who are in the category of last academic degree obtained in Mexico was the bachelor's degree (1,475,193.9329 USD). The same process must be done to obtain the total public spending invested for the study of each previous level of education necessary in order to obtain the last degree, in all the possible categories. Those categories are the options for "last academic degree obtained in Mexico" presented in the first column, those may be the following kinder garden, upper secondary school, bachelor, master, and doctorate level.

By having the total spending amounts in each level of education multiplied for all the respondents of each of the 5 possible categories (having all the cells completed); the next step is to add the amounts of total public spending invested on each level of education (vertically by columns) in order to obtain the subtotals of the total public spending invested for the study each level of education entirely for all the respondents. In the end, it is necessary to add the 7 subtotals, the total public spending for each level of education, in order to obtain the current losses due to the investment in the education of the 90 Mexicans, who currently are in the Czech Republic and decided to participate in this research.

These are the current losses, money invested in the education of the Mexican nationals which is not being profitable in the Mexican territory, at least at the moment for the benefit of the country. However, this amount cannot be considered as total losses, since through the survey information was obtained regarding the intentions of some Mexicans to go back and establish definitely in Mexico. At the moment in which any person who participated in this research decides to return and establish in Mexico, the total spending in the education invested in the training of that person can no longer be considered a current loss.

Table 8 - Current losses due to the total public spending invested in education

Current losses due to the total public spending invested in Education								
Total students		Total investment in education per education level						
Highest level of education obtained in Mexico	Number of Mexicans	Kinder Garden	Primary school	Secondary school	Upper Secondary School	Bachelor	Master	Doctorate
Kinder Garden	2	\$7,143.27						
Upper Secondary	6	\$21,429.82	\$38,963.30	\$29,910.06	\$40,911.47			
Bachelor	58	\$207,154.89	\$376,645.26	\$289,130.63	\$395,477.52	\$1,475,193.93		
Master	21	\$75,004.36	\$136,371.56	\$104,685.23	\$143,190.14	\$534,121.94	\$213,648.78	
Doctorate	3	\$10,714.91	\$19,481.65	\$14,955.03	\$20,455.73	\$76,303.13	\$30,521.25	\$61,042.51
Subtotals per level		\$321,447.25	\$571,461.77	\$438,680.95	\$600,034.86	\$2,085,619.01	\$244,170.03	\$61,042.51
Total losses								\$4,322,456.38

Source: Own calculations

The same calculations were done for (Table 9), however, the difference lies this second time in the calculations that were not made using the complete sample of the 90 Mexicans who participated in this research. This table only considered the people who during the survey mentioned they are not planning to return and establish in Mexico. In this case, it was also identified the academic path of each of the 64 Mexicans in order to locate them in the corresponding category regarding "last academic degree obtained in Mexico".

In the same way, it was necessary to multiply the total public spending invested for each level of education by the number of years must be taken at each level of education in order to obtain the final degree. The obtained amount was multiplied by the number of Mexicans who studied that same level of education in the same category of "last academic degree obtained in Mexico". The corresponding sums were made (vertically) in order to obtain the subtotals regarding the total public spending invested for the study of each level of education entirely for all the respondents, including all 5 categories.

In the end, the 7 subtotals which represent the total public spending invested in each level of education in order to educate all 64 Mexicans who already decided are not going back to establish in Mexico were summed. As a result of this calculation, it was obtained the number of total definitive losses due to the total public spending invested in the education of 64 Mexican nationals who certainly are not going back to the country to establish there.

This is the amount of total public spending invested in education that can be considered as actual definitive losses and not just temporary losses, it is money that Mexico invested in order to educate its nationals and expecting to have profits in the future. However, this

amount of money spent on education will not be profitable anymore in benefit of Mexico, at least it will not generate again any productive work activities in the country; since those people already took the decision of not going back to establish definitely there.

Table 9 - Total definitive losses due to the total public spending invested in education

Total definitive losses due to the total public spending in Education								
Total students		Total investment in education per education level						
Highest level of education obtained in Mexico	Number of Mexicans	Kinder Garden	Primary school	Secondary school	Upper Secondary School	Bachelor	Master	Doctorate
Kinder Garden	2	\$7,143.27						
Upper Secondary	4	\$14,286.54	\$25,975.54	\$19,940.04	\$27,274.31			
Bachelor	44	\$157,151.99	\$285,730.89	\$219,340.47	\$300,017.43	\$1,119,112.64		
Master	12	\$42,859.63	\$77,926.61	\$59,820.13	\$81,822.94	\$305,212.54	\$122,085.02	
Doctorate	2	\$7,143.27	\$12,987.77	\$9,970.02	\$13,637.16	\$50,868.76	\$20,347.50	\$40,695.01
Subtotals per level		\$228,584.71	\$402,620.79	\$309,070.67	\$422,751.83	\$1,475,193.93	\$142,432.52	\$40,695.01
Total losses								\$3,021,349.46

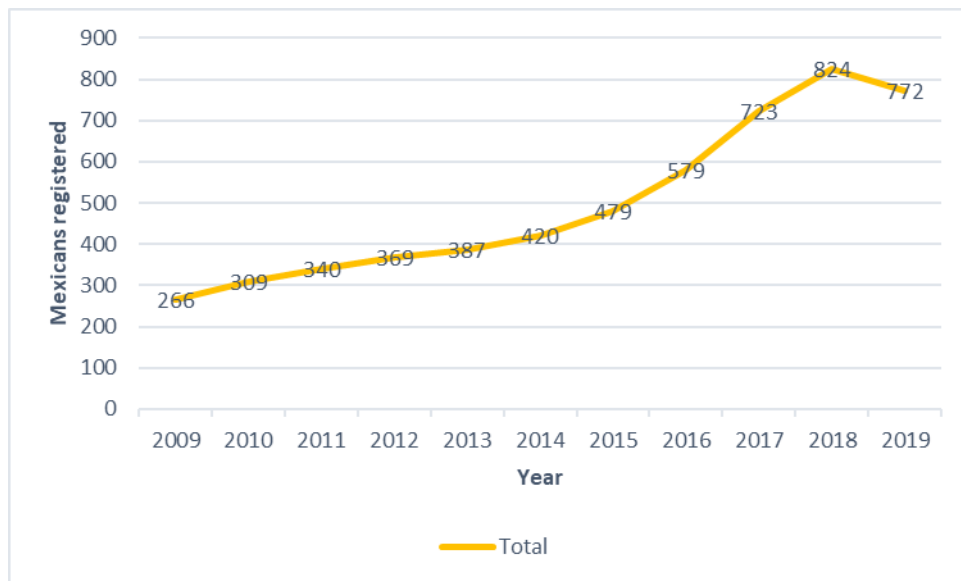
Source: Own calculations

7.3 Mexican Migration analysis in the Czech Republic

This analysis regarding the Mexican migration trends to the Czech Republic was carried out with help of secondary data provided by the Czech Statistical Office website of the Czech National Government. The data demonstrate in the last 10 years period, from 2009 to 2019 (which is the year of most recent available data) the amount of Mexican migration has been increasing. During 2009 there were a total of 266 Mexican citizens registered in the country, the numbers year by year increased constantly reaching the highest point during 2018 with a total of 824.

The only drop presented was during 2019 even so, the number of Mexican living in the Czech Republic reached that year 772. From 2009 until the last available data recovered in 2019, it is possible to state along those 10 years the Mexican migration has increased. It has seen its numbers multiplied by almost 3 times, going from 266 Mexican citizens to 772 Mexican nationals based in the Czech Republic. More detailed information is presented in (Figure 26) which provides the exact data regarding the Mexican migration to the Czech Republic from the period of 2009 – 2019 in a visual form for an easier understanding.

Figure 26 - Mexican population registered in the Czech Republic from 2009-2019

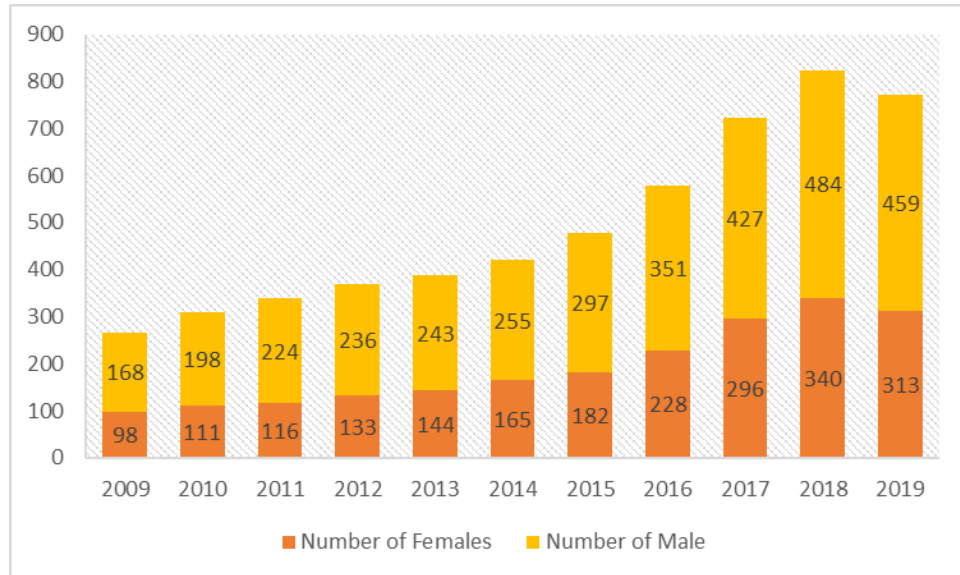


Source: Czech Statistical Office (CZSO, 2020) - Foreigners in the Czech Republic - excl. asylum granted.

(Figure 27) wide the previous information, in this graph it is also presented the recovered information regarding the numbers of Mexican migration to the Czech Republic from the period 2009- 2019. On the other hand, this graph provides detailed information separated by gender of the Mexican population, it is possible to observe the majority of the Mexican citizens based in Czech lands have been from the male gender since the year 2009. In the course of 2009, the male gender was 1.7 times bigger than the number of Mexican women while in 2019 the male gender was 1.47 times bigger than the female gender in the Mexican population which shows a small decrease between the differences of men-women.

During the year 2009, there were only 98 Mexican women living in the Czech Republic, ten years later the number is three times bigger than it used to be reaching the 313 Mexican women in Czechia. On the other hand, during 2009 the number of Mexican men living in the country was 168 after 10 years the number has multiplied by 2.74 reaching a total of 459 Mexican citizens of the male gender.

Figure 27 - Mexican population registered in the Czech Republic from 2009-2019 divided by gender



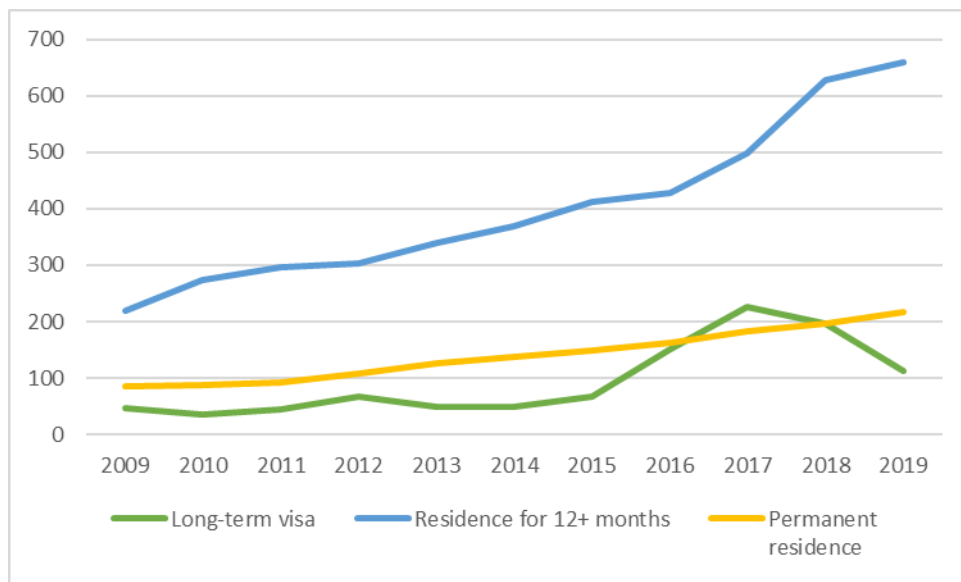
Source: Czech Statistical Office (CZSO, 2020) - Foreigners in the Czech Republic - excl. asylum granted.

In order to emigrate to the Czech Republic, it requires the necessary process and there are different ways to do it as was mentioned in the Czech Republic Overview chapter point 5.1 “Immigration Policy-Czech Republic”. Along the process there are different documents that prove your legal stayed in the country, in this point are shown the most used by the Mexican nationals.

In (Figure 28) the data show as the most common document for the Mexican population to arrive at the Czech Republic is the residence for 12+ months. By the year 2009, there were a total of 220 residence permits for 12+ months in hands of Mexican citizens, 10 years later in 2019 that number was multiplied by 3 times reaching the total of 660 residence permits for 12+ months for the Mexican population. The least popular document the Mexican people use to come to Czechia with is the long-term visa which has shown the smallest numbers over the years. By the year 2009, there were a total of 46 Mexicans with this type of document in the country, after ten years that number was multiplied by 2.5 times hitting the total of 113 long term visa documents for the Mexican population.

The permanent residence is the last displayed document in the graph, this has been increasing slowly but steady, by the year of 2009 there were 85 Mexican as permanent residents in Czech lands after ten years that number was multiplied by 2.57 times reaching the number of 218. It is important to point out neither in this graph nor in the database from which this information has been extracted a mention is done regarding the Mexican people who born with or obtained Czech citizenship; the people who have double Czech-Mexican citizenship may not be included in these data causing an error marge.

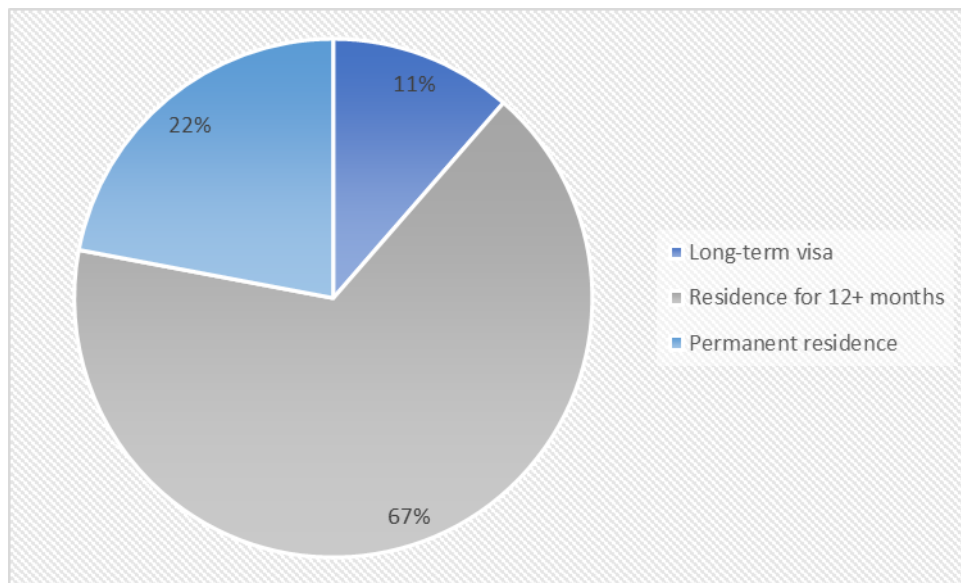
Figure 28 - Mexican population registered in the Czech Republic from 2009-2019 by type of document



Source: Czech Statistical Office (CZSO, 2020) - Foreigners in the Czech Republic - excl. asylum granted.

By the year 2019, the Mexican migration in the Czech Republic had the following numbers, there were a total of 772 Mexican citizens registered. 113 that represents 11% of the total were holding a long-term visa, 659 which represents 67% were registered with a residence permit for 12+ months. In addition, there were 218 holders of Czech permanent residence that is 22% of the total Mexican population in the Czech Republic. (Figure 29) exhibits the already mentioned information in a visual form for an easier understanding.

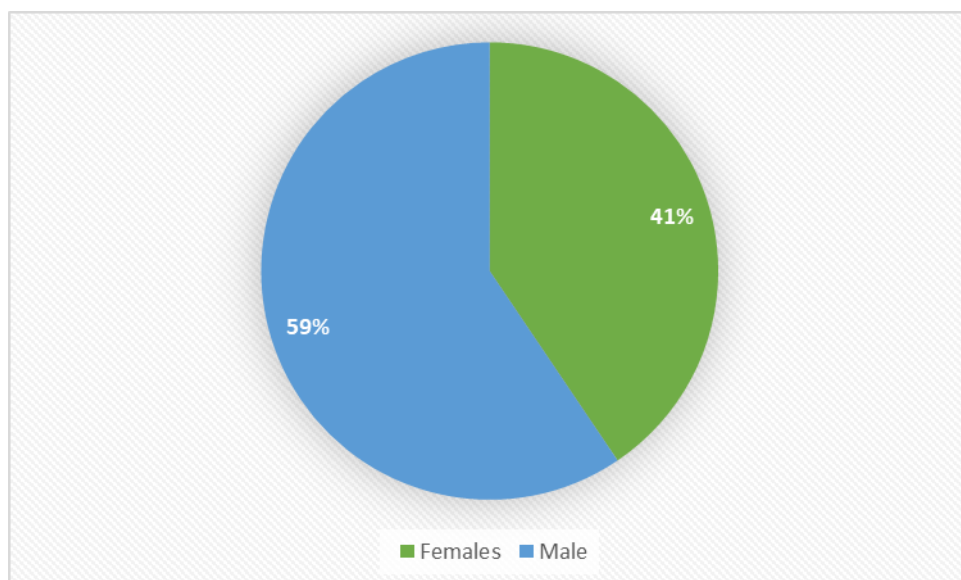
Figure 29 - Mexican population registered in Czech Republic by type of document during 2019



Source: Czech Statistical Office (CZSO, 2020) - Foreigners in the Czech Republic - excl. asylum granted.

From the 772 Mexican registered in the Czech Republic by the year 2019, a total of 459 identified themselves with the male gender which represents 59% of the total population, the remaining 41% of the total population identified themselves with the female gender being 313. (Figure 30) provides a visual version of the already mentioned information.

Figure 30 - Mexican population registered in Czech Republic by gender during 2019



Source: Czech Statistical Office (CZSO, 2020) - Foreigners in the Czech Republic - excl. asylum granted.

(Table 10) displays the total numbers and the distribution of the Mexican population in the Czech Republic in different categories over 10 years from 2009 until 2019. The table shows the total numbers of Mexican nationals over time, its distribution by gender, in total numbers, percentages. As well as its distribution according to the type of document used for the immigration process including long-term visa, residence for 12+ months, and permanent residence, dividing the numbers of each category by gender.

Table 10 - Mexican population registered in Czech Republic 2009-2019

Year	Total	Females	% Females	Male	% Male	Long-term visa	Females	Male	Residence for 12+ months	Females	Male	Permanent residence	Females	Male
2009	266	98	37	168	63	46	11	35	220	87	133	85	35	50
2010	309	111	35.92	198	64	36	13	23	273	98	175	88	35	53
2011	340	116	34.1	224	66	44	15	29	296	101	195	91	35	56
2012	369	133	36.04	236	64	66	33	33	303	100	203	108	42	66
2013	387	144	37.21	243	63	48	27	21	339	117	222	125	47	78
2014	420	165	39.29	255	61	50	25	25	370	140	230	137	50	87
2015	479	182	38.00	297	62	68	34	34	411	148	263	148	57	91
2016	579	228	39.38	351	61	151	74	77	428	154	274	162	59	103
2017	723	296	40.94	427	59	225	117	108	498	179	319	182	63	119
2018	824	340	41.26	484	59	197	113	84	627	227	400	196	64	132
2019	772	313	40.54	459	59	113	65	48	659	248	411	218	70	148

Source: Czech Statistical Office (CZSO, 2020) - Foreigners in the Czech Republic - excl. asylum granted.

7.4 Discussion

As a result of the data thrown by this research, it is possible to affirm the research question has been answered in a negative form. The results from part 7.1 question 8 exhibit, the economic reasons such as limited job opportunities and low salaries in the country are not the main reasons why the Highly Educated Mexicans based in the Czech Republic decided to emigrate from their country of origin.

In fact, the most common reasons for the Mexican community, who participated in this research, to decided to emigrate are mainly two. The most common emigration reason is due to a sentimental partner chosen by 30% of the total sample, the second most common emigration reason among the Mexican community is due to studies chosen by 26% of the total contestants. Actually, the limited job opportunities and the low salaries in Mexico category was chosen only by 6 people of the total participants. For this reason, it is possible to state these factors did not play a key role in the emigration decision-taking of the Mexicans who answered the survey.

It is also possible to affirm the vast majority of the people who participated in the research obtained as a minimum the first academic degree of the higher education level, this 91% obtained at least the bachelor's degree in the Mexican territory. This does not mean the rest 8% does not have at the moment higher education, since these people could study the rest levels of education abroad, however, this question was not considered in the survey for not being relevant to the research purpose.

The three most common areas of study for the Mexican people who participated in the research are Economics and Finance, Engineering, and lastly, Science and Physics Sciences. In addition, the retrieved data exhibit 85% of the total sample already had more than one year of work experience before deciding to emigrate. At the moment, 87% of the total sample is working, from that total amount of 78 people, it is possible to affirm 54% is working in something not related to the area of previous studies. On the other hand, the rest 46% is working in the same area of previous education obtained in Mexico.

Regarding the approximate losses originated by the brain drain from Mexico to the Czech Republic, these may be considered in two different branches. The first branch is the current losses from the total public spending invested in education for training the Mexican community who is currently living in the Czech Republic. In this case, the total amount of current losses Mexico is facing due to the brain drain to the Czech Republic at the moment is set at 4,322,456.38 USD, money that was spent in order to educate the 90 Mexican nationals who participated in this research.

It is important to point out this cannot be considered as definitive losses; it is simply money that is not being profitable at the moment since is not generating productive work activities in the Mexican territory. The reason why it is possible to say it does not contribute directly to the growth and development of the country, however, this does not mean Mexico is not receiving any benefit from this investment. The remittances the Mexican community sends to the country may be considered as one benefit and the money spent during their travels home can be considered as other.

Furthermore, as these are considered temporary losses, they have the possibility of being profitable in the future for benefit of Mexico. Once the Mexican citizens return to their country more trained, more prepared, and with more knowledge and reincorporate themselves into the national economy, the total public spending in education will start being profitable again.

On the other hand, the total public spending invested in education that can be considered as actual definitive losses is set at 3,021,349.46 USD amount that was invested in order to educate its nationals and expecting to have profits in the future. However, that total amount spent on education will not be profitable anymore in benefit of Mexico, at least it will not generate again any productive work activities in the country, since those people already took the decision of not going back to establish definitely there.

As it was mentioned before this does not mean Mexico is not receiving any benefit from the investment in the education of the Mexican community who participated in this research. There are Mexicans who, living in the Czech Republic, continue to promote the Mexican economy by doing business between the two countries, some others send remittances to the country which may be considered as another benefit.

Lastly regarding the growth of the Mexican migration to the Czech Republic, the collected data exhibit a gradual growth which undoubtedly has increased over the last 10 years. During 2009 the total number of Mexican people registered in the Czech Republic was a total of 266, the numbers year by year increased reaching the highest point during 2018 with a total of 824 Mexicans. The only drop is presented during 2019 when the total number of Mexicans living in the Czech Republic descended to 772, from the data it is possible observe over 10 years the Mexican community has multiplied its numbers by almost 3 times going from 266 to 772.

8. CONCLUSION

Migration is an issue vitally important for Mexico since in part its economy depends on it, however, the branch of brain drain is a poorly studied reality. There is not a lot of information available regarding the topic, not to mention the lack of consistency in the existing data; most of the time there is simply no information regarding how many and where the Highly Educated Mexican migrants are nor on the losses this type of migration entails towards Mexico. Those reasons motivated the development of this research, this Diploma Thesis contributes to exposing the current situation of the Mexican Brain Drain focusing on the Mexican community-based in the Czech Republic.

Regarding the identification of the reasons which induced the Highly Educated Mexicans based in the Czech Republic to decide to emigrate. At the end of this Diploma Thesis, it is possible to conclude the most common reasons for the Mexicans who participated in this research, to decide to emigrate are mainly two. The majority of the Mexican nationals based in the Czech Republic decided to emigrate mainly due to a sentimental partner or studies.

It is possible to conclude from the retrieved data the vast majority of the people 91% who participated in the research obtained at least a bachelor's degree in the Mexican territory. From the research, it is also possible to distinguish the three most common areas of study are Economics and Finance, Engineering, and lastly, Science and Physics Sciences. Regarding the work experience, it is possible to affirm 85% of the total contestants already had more than one year of work experience before deciding to emigrate. At the moment, 87% of the total sample is working in the Czech Republic, from the total amount that percentage represents only 46% is working in something related to the area of education obtained in Mexico.

Once the analysis is completed it can be affirmed the following regarding the losses Mexico faces in the branch of total public spending invested in the education of the Highly Educated Mexican community-based in the Czech Republic.

The first branch is the current losses from the total public spending invested in the education and the training of the totality of respondents. In this case, the total amount of current losses due to the brain drain is set at 4,322,456.38 USD, money that was spent in order to educate the 90 Mexican nationals who participated in this research. It is important to point out, these are considered only temporary losses, at the moment which any person decides to return, the person will arrive more trained, more prepared, and with more knowledge. When the person reincorporates into the national economy, the total public spending on the education of this Mexican will start being profitable to Mexico's benefit again.

On the other hand, the total public spending invested in education that in fact can be considered as actual definitive losses is set at 3,021,349.46 USD. This amount spent on education will not generate again any productive work activities in the country, since those people already took the decision of not going back to establish definitely there.

Furthermore, this Diploma Thesis demonstrates the Mexican migration to the Czech Republic has been gradually increasing over the last 10 years. Data recovered from official Czech sources affirm during 2009 the total number of Mexican people registered in the country was 266 people, after ten years the Mexican community has seen its numbers multiplied by almost 3 times, in 2019 the numbers reached a total of 772 people.

In fact, the main contribution of this research consists in state there is sufficient evidence in order to accept the research hypothesis. As the result of the research conducted it is possible to state despite economic reasons such as the limited job opportunities and the low salaries in Mexico contribute to some nationals decide to emigrate; those are not the main reasons why the Highly Educated Mexicans based in the Czech Republic decided to emigrate from their country of origin.

9. RECOMMENDATIONS

At the end of this research, the possibility is left open to address different methodologies for later studies related to the topic. These different methodologies may be either more advanced or at the same level but with different instruments.

Likewise, the international academic community, university classmates, and colleagues, in general, are invited to bear in mind the importance of the brain drain, for both the origin country and the host country. The Mexicans who read this research are invited to continue exploring and learning about the subject, to create awareness about the current situation Mexico is facing in this area, and to be able to contribute as much as possible for the benefit of our country.

The Mexican Brain Drain is a sadly poorly studied fascinating and extensive topic, however, it has a lot of information to offer. For future researches linked to the topic, it is recommended to update the data presented in this research to the current data at that moment. In addition, it is recommended to go deep on the losses and not only consider the losses in the branch of the total public spending invested in education as it was considered for this research. Finally, it is recommended to address the question of whether the migration of Highly Educated Mexicans has been exploited for the growth and economic development of the Czech Republic.

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11. APPENDIX

The following pages include the completed version of the designed survey for the research's practical part, including its 21 questions and corresponding options of answers.

1. What gender do you identify with?

- Male
- Female

2. What is your age?

- 16-25 years old
- 26-35 years old
- 36-45 years old
- 46-55 years old
- 56 years old or more

3. From which Mexican State are you from?

Specify: _____

4. What is the highest level of education you obtained in Mexico?

- High school or less
- Upper secondary school
- Bachelor-Technical career
- Master's degree
- Doctorate

5. Choose the sphere of the last academic degree you obtained in Mexico.

- | | |
|---|-----------------------------|
| • Upper secondary school or less | • Economic and Finance |
| • Academia and Teaching | • Law and Management |
| • Arts and Culture | • Nursing and Nutrition |
| • Services (Entrepreneur/
Restaurants/Tourism) | • Architecture and Design |
| • Agronomy and Veterinary | • Engineering |
| • Science /Physics Sciences | • Medicine and Odontology |
| • Chemical Sciences | • Psychology |
| | • Human and Social Sciences |

6. Specify the name of the last academic degree you obtained in Mexico:

Specify: _____

7. How many years of work experience did you already have in Mexico?

Specify: _____

8. What were the reasons for you to emigrate from Mexico?

- Studies
- Family
- Sentimental partner
- Cultural experience
- Better lifestyle abroad
- Economic situation of the country
- Political situation in the country
- Limited job opportunities and low salaries in Mexico
- Insecurity/violence/crime in Mexico

9. ONLY IF YOU ARRIVE AS STUDENT.

Did arrive to the Czech Republic with a scholarship to support your studies?

- Yes
- No

10. ONLY IF YOU ARRIVE AS STUDENT.

What kind of entity supported you with the scholarship?

Specify: _____

11. Where do you live in the Czech Republic?

- Prague
- Brno
- Pilsen
- Ostrava
- Other: _____

12. For how long have you lived in the Czech Republic?

Specify: _____

13. Has the length of your stay been constant or accumulated?

- Constant
- Accumulated

14. What is your legal status in the Czech Republic?

- Temporary resident
- Permanent resident
- Dual Czech/Mexican citizen

15. What is your current occupation?

- Student
- Housewife
- Academic sector
- Public sector
- Private sector
- Self-employed/ Entrepreneur
- Unemployed

16. Does your occupation in the Czech Republic is in the same sphere as it was in Mexico?

- Yes
- No

17. What is the sphere of your current occupation in the Czech Republic?

- | | |
|--|-----------------------------|
| • Academia and Teaching | • Law and Management |
| • Arts and Culture | • Nursing and Nutrition |
| • Services (Entrepreneur/ Restaurants
/Tourism) | • Architecture and Design |
| • Agronomy and Veterinary | • Engineering |
| • Science /Physics Sciences | • Medicine and Odontology |
| • Chemical Sciences | • Psychology |
| • Economic and Finance | • Human and Social Sciences |

18.Monthly income after taxes:

- 16,000 CZK or less
- 16,001 CZK – 25,000 CZK
- 25,001 CZK – 34,000 CZK
- 34,001 CZK – 43,000 CZK
- 43,001 CZK – 52,000 CZK
- 52,001 CZK – 61,000 CZK
- 61,001 CZK or more

19.For how long are you planning to stay in the Czech Republic?

Specify: _____

20.Are you considering going back and establish definitely in Mexico?

- Yes
- No

21.In case your answer was affirmative, what are your motivations?

Specify: _____