



VILNIUS GEDIMINAS TECHNICAL UNIVERSITY
FACULTY OF BUSINESS MANAGEMENT
DEPARTMENT OF INTERNATIONAL ECONOMICS AND MANAGEMENT

Eskedar Maštavičienė

**ATTRACTING AND RETAINING PROFESSIONAL SPECIALISTS FROM
FOREIGN COUNTRIES UNDER CONTEMPORARY CONDITIONS OF
BUSINESS INTERNATIONALIZATION**

**PROFESIONALIŲ SPECIALISTŲ IŠ UŽSIENIO ŠALIŲ PRITRAUKIMAS IR
IŠLAIKYMAS ŠIUOLAIKINĖMIS VERSLO INTERNACIONALIZACIJOS
SĄLYGOMIS**

Master's Thesis

Business Management study programme, state code 621N10008

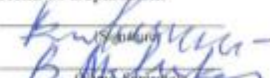
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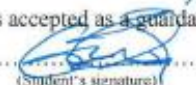
To analyze theoretical sources, reports and collect empirical data in order to investigate the phenomena of highly skilled professionals' international migration, its impact on economic competitiveness of countries; identify the drivers and motivators, strategies to enhance country's competitiveness by strengthening human resource pool and attracting foreign professionals. Based on research results to provide suggestions for development of national policy towards attracting and retaining highly skilled professionals to Lithuania

Research methods: analysis of research literature and reports to identify the trends, analysis of statistical data, case analysis, application of the interview method.

Consultants of the Master Thesis:

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Annotation

The master's thesis analyzes highly skilled professionals' migration, theories related to highly skilled professionals migration, and Lithuania's strategy for attracting and retaining professional specialist from foreign countries under contemporary conditions of business internationalization. The aim of this research was to provide suggestions for drawing or making changes on a national policy towards attracting and retaining highly skilled professionals to and in Lithuania; as positive dynamics of the highly skilled professionals pool of the country is a key factor to ensure international competitiveness and sustainable growth of the national economy. The research has four chapters: the first chapter is a theoretical analysis, in which general overview of global challenges with respect to international migration of highly skilled professionals, the second chapter deals with migration theories applied to migration of highly skilled professionals, the third part is an empirical research based on analysis of statistics to reflect general trends of labour market structure in Lithuania, followed by country case analysis, a research based on experts' view and a survey on emigration push-pull factors were analyzed. The analysis of the theoretical sources and empirical data has shown interdependence of international business and international highly skilled mobility trends. The fourth part contains suggestions which could be included as potential elements into Lithuanian policy for attracting and retaining highly skilled professionals in the country. The thesis consists of 72 pages without appendixes, 21 figures, 3 tables, 4 boxes, 3 appendixes and 110 references.

Keywords: attraction and retention of highly skilled professionals, migration theories, country competitiveness, push-pull factor.

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Pavadinimas **Profesionalių specialistų iš užsienio šalių pritraukimas ir išlaikymas šiuolaikinėmis verslo internacionalizacijos sąlygomis.**
Autorius **Eskedar Maštavičienė**
Vadovas **Asta Radzevičienė**

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Anotacija

Magistro darbe nagrinėjama aukštos kvalifikacijos specialistų migracija, teorijos, susijusios su aukštos kvalifikacijos specialistų migracijai ir Lietuvos strategija pritraukti ir išlaikyti profesionalius specialistus iš užsienio šalių šiuolaikinėmis verslo internacionalizavimo sąlygomis.

Šio darbo tikslas teikti pasiūlymus kuriant arba darant pakeitimus nacionalinėje Lietuvos strategijoje pritraukti ir išlaikyti profesionalius specialistus iš užsienio šalių; teigiama aukštos kvalifikacijos specialistų dinamika yra esminis veiksnys siekiant užtikrinti tarptautinį konkurencingumą ir tvarią nacionalinę ekonomiką.

Darbas susideda iš keturių dalių: pirmojoje dalyje pateikiama teorinė analizė ir iššūkių, susijusių su aukštos kvalifikacijos specialistų tarptautine migracija bendra apžvalga. Antroji dalis skirta migracijos teorijoms susijusioms su aukštos kvalifikacijos specialistų migracija. Trečiojoje dalyje pateikiamas empirinis tyrimas atliktas remiantis statistine analize, atspindintis bendrąsias darbo rinkos tendencijas Lietuvoje. Po to pateikta šalies atvejo analizė apimanti ekspertinį interviu ir apklausą apie migracijos trukdžius.

Išnagrinėjus teorinius šaltinius ir empirinius duomenis, buvo pastebėta tarpusavio priklausomybė tarp tarptautinio verslo ir aukštos kvalifikacijos darbuotojų mobilumo tendencijų. Ketvirtojoje dalyje pateikiami pasiūlymai, kurie galėtų būti dalis Lietuvos strategijos pritraukti ir išlaikyti profesionalius specialistus iš užsienio šalių.

Darbą sudaro 72 puslapiai be priedų, 25 paveikslas, 3 lentelės, 3 priedai ir 110 bibliografinių šaltinių.

Prasminiai žodžiai: aukštos kvalifikacijos specialistų pritraukimas ir išlaikymas, migracijos teorijos, šalies konkurencingumas, skatinimas ir barjerai.

(the document of Declaration of Authorship in the Final Degree Paper)

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**DECLARATION OF AUTHORSHIP
IN THE FINAL DEGREE PAPER**

May 30, 2017

I declare that my Final Degree Paper entitled „Attracting and Retaining Professionals from Foreign Countries under Contemporary Conditions of Business Internationalization“ is entirely my own work. The title was confirmed on November 16, 2015 by Faculty Dean's order No. 277vv. I have clearly signalled the presence of quoted or paraphrased material and referenced all sources.

I have acknowledged appropriately any assistance I have received by the following professionals/advisers:
Assoc Prof Dr Asta Radzevičienė.

The academic supervisor of my Final Degree Paper is Assoc Prof Dr Asta Radzevičienė.

No contribution of any other person was obtained, nor did I buy my Final Degree Paper.


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INTRODUCTION

The future success of a country depends on highly skilled human resources. The outward and inward mobility of highly skilled professionals can significantly change human resource potential of a country. According to OECD, there is a perception that highly skilled migrants, despite their relatively small numbers, may substantially affect innovation and economic growth, for they are a significant part of the human capital pool of their countries. And vice versa it's also believed that emigration of the highly skilled labor force leads a country to a brain drain. A country which loses its highly skilled labor force becomes less attractive for a knowledge intensive international business development which could hinder such companies' entry of the market fueling up highly-skilled professionals' emigration. Recent reports show the high-scale departure of highly-skilled professionals from emerging countries tends to depress income levels and long-run economic growth rates of those markets. Despite the efforts to control the balance of migration by national and regional policies, the governments have to accept the fact that mobility of labor force is increasing and is less controlled.-Today people are affiliated to more than one place at once, transnational communication, networks, and relationships make the sustainability of a one-to-one relationship between citizenship and territoriality almost impossible. Countries are getting more and more interdependent, making nations to be no longer self-sufficient. According to the OECD Economic Assessment report, Lithuania is exporting 81% of its GDP ("OECD Economic Surveys: Lithuania 2016 - Economic Assessment," 2016). The abolishment of borders within the EU member states has not only brought an opportunity of accessing the single market without barriers but also gave Lithuanian citizens to travel and reside anywhere within EU member states.

The mass emigration of Lithuanian youth is growing at an alarming rate, which not only affects the country's demography but also directly impacts the future economic activities of the country. Lithuania is facing a huge challenge due to high emigration rate for a couple of decades backed by low-birth rate creating an extremely negative impact on the labor market. According to Lithuanian Banks' forecast for the year 2017, due to less and less young people joining the labour force each year and high number of outward migrants, the labour market will be in dire need of employees, where there will be job offer by enterprises and in order to fill the vacant positions, enterprises will be forced to raise wages they offer, in order to attract employee, the biggest challenge for business is the productivity of employees remain the same while the salary is increasing; which as a result impacting business competitiveness in the market (Lithuanian Bank, 2016). Lithuania's failure to satisfy the labor demand will directly affect the development of international business and also hinders international companies from entering the market in some high skill intensive sectors due to the lack of professionals. The government needs to come up with an alternative to fulfill the demand of the labor market; in order to have a self-sustaining economy.

Things do not seem to change in the short-run either, according to (OECD, 2013), Lithuanians emigration tendency is permanent or long-term emigration as many families with children are leaving the country, the fact that the attitude towards emigrants being positive and young people becoming more mobile and prone to migration fuels up the situation. Lithuania has almost lost 22% of 1990 population and the United Nations 2015 population projection suggests that Lithuania will lose 15% its working population in the coming 15 years. Lithuania's working age population is projected to decline by 44% between 2013 and 2040, due to aging, as well as ongoing emigration.(European bank for reconstruction and development, 2016) Lithuania is facing a huge challenge due to high emigration rate for a couple of decades backed by low-birth rate creating a catastrophic momentum for the labor market. According to Lithuanian Banks' forecast for the year 2017, due to less and less young people joining the labour force each year and high number of emigrants the labour market will be in dire need of employees, where there will be job offer by enterprises and to fill the vacant space enterprises need to raise the salary they offer in order to attract employee, the problem is the productivity of employees remain the same while the salary is increased which at last will hurt enterprises' competitiveness in the market.

The main research question for this thesis is "how to attract and retain highly skilled labor force in order to be competitive in the global market?" in order to get the answer to that, we need to answer several questions including what are the factors which push highly skilled people from any country? What are the factors which are attracting highly skilled people to any country? What are the barriers which make highly skilled migrants leave any country? What are the motivators which make highly skilled to remain in any country?

The purpose of this research is to find out if Lithuania has a strategy on how to attract and retain highly skilled labour in order to reach the strategy set in 2012 "Lithuania 2030", that for very long time the Lithuanian government has focused on either attracting direct FDI to the country or have a long and fruitless agenda on how to bring back emigrants, and it seems every political party is using this as a slogan for every election, the research will also try to analyze if Lithuania is using the right strategy to attract FDI based on the ability of the ability of the labour market, by asking experts of their view. The research will try to answer if Lithuania's strategy to attract and retain highly-skilled labor competitive in comparison to other EU member states. And to see the perspective of both emigrants and experts from various areas of the economy. As the time where the European Union has declared to become a knowledge-based economy through innovation and high skill development; creating the right policy to attract and retain highly-skilled labor force is imminent. Facing the demographic problem Lithuania has today if the problem is not addressed it will lead the country to a position where the highly-skilled human resource pool would be so low that Lithuania will be unable to achieve its 2030 strategic plan. Lithuania 2030 is a national strategy document which states and outlines Lithuania's vision of the future. The

strategy encompasses three priority strategies 1) Smart Society which is defined as, a happy society, open to ideas of every citizen, ready for challenges and innovation, politically savvy; adhering to the values of self-governance and solidarity. 2) Smart Economy which is, flexible and competitive, it creates high added value rooted in knowledge, innovation, and entrepreneurship. It adheres to the values of social responsibility and sustainable growth. 3) Smart Governance, open, inclusive and goal-oriented, Lithuanian governance culture meets the needs of the society by providing high quality, efficient and effective public services. It is highly skilled and able to choose right long-term strategic decisions. (Lietuva 2030, 2016) Can it be achieved without having the policy towards talents and highly skilled labor force? The major research question is, therefore, how to make national policies more consistent and more effective in order to attract highly skilled human resources to Lithuania.

The aim of this research is to provide suggestions for drawing or making changes on a national policy towards attracting and retaining highly skilled professionals in the country.

The **main tasks** set in order to achieve the aim of the thesis are to:

1. Analyze recent trends of migration of highly skilled professionals and impact on economic competitiveness of countries;
2. Identify drivers of international mobility of highly skilled professionals in international economy.
3. Analyze theories related to migration and social capital mobility.
4. Investigate the demand, push and pull factors of highly skilled professionals.
5. Define prevailing motivators of inward and outward mobility according to the results of empirical research.
6. Based on empirical findings and theoretical background provides suggestions for national policy towards attracting and retaining highly skilled professionals in the country.

Research methodology: This is a case-based research; based on the contemporary global phenomena of migration. Like most European countries Lithuania is facing a challenge of an imbalance in the decreasing number of the population due to migration, low birth rate, and aging population. But what worries the media and a lot of coverage are given for the huge gap between outflow and inflow of migrants; Lithuanian emigration rate is one of the highest in Europe. To understand this phenomenon, the research is divided into two theoretical and empirical parts. In this research, the theoretical part will be divided into two parts part one covers theories related to migration: based on migration theories to understand the root cause of emigration of highly skilled people; the interplay between economic development, migration, and labor market; the impact of migration on different regions; the benefit or downside of four freedoms of the European Union; while part two, is dedicated to knowledge management, giving an emphasis on societal knowledge management; where countries need to view the importance of enhancing the knowledge capital in order to be competitive in the global market.

The empirical analysis of this research will bring the stakeholders interested in and affected by the phenomena of emigration of the best and brightest and help to understand if all stakeholders are on the same page when it comes to solving the issue on how to attract and retain highly skilled labor force having in mind that Lithuania's working age population is projected to decline by 44 percent between 2013 and 2040, due to aging, as well as ongoing emigration.(European Bank for Reconstruction and Development, 2016) Does the lawmakers put the right and clear strategy to tackle the loss of highly-skilled labor force pool? Are Lithuanian higher education institutes fulfill the demand of highly-skilled professionals by the market? Is the quality and quantity of highly skilled professionals joining the labor force each year sufficient? This research will gather a primary data through interviews of experts from several stakeholders from governmental institutes, NGOs working towards attracting FDI to the country and higher education and research institutes.

Research methods applied: analysis of scientific literature, followed by comparative analysis of literature and empirical (expert opinion based) research. Data for the empirical survey has been collected using questionnaire.

The paper consists of three chapters with the first part unfolding problems of the research. The second chapter continues with an analysis of the literature on the conception of migration, and the role of highly skilled professionals in building social capital and economic potential of the country in order to provide a theoretical framework for the empirical study. In the third part the design and results of the empirical research aimed at examining the state of art of national policy. According to the results of research, proposals for a national policy to attract and retain highly skilled professionals to Lithuania are formulated.

1. THEORETICAL FRAMEWORK

Now more than ever we live in a rapidly changing, globalized, innovative and moving world where distances are getting smaller, choices bigger, freedom greater. And this leads to not only better connections, faster delivery of goods and facilitated knowledge sharing through modern technology; but also to moving and mobile generations. According to the United Nations 2015 report, there are 244 million international migrants in the world, an increase by 71 million since the year 2000. The median age is 39 years of age. Two-thirds of international migrants live in Europe and Asia 76million and 75million respectively (United Nations, 2015a). In future immigration is believed to be the main source of population for high-income countries (United Nations, 2015b) The outflow of educated workers is expected to negatively impact the domestic stock of cumulated human capital and the acceleration of emigration rate is higher for highly skilled than the rest (Kaliannan et al, 2005). While brain drain is a phenomenon which occurs in source countries study suggests that brain waste also takes place in destination countries (Arslan et al., 2014).

International trade is believed to be one of the main cause which fueled migration, technological changes, and globalization of culture have also played a significant role in the ever increasing number of migrants. For more on the impact of migration and globalization on source country in this case Dominican Republic (Folkersma, 2010) some researchers argue that labour market is globalized; in future more and more people will be travelling the world because of skill-mismatch they might face in their country of origin and also because of lack of migration barriers (Johnston, 2000). Johnston suggested that developed countries who are opening their borders for foreign workforce will benefit. He also believes that developing countries who are open to training and skill sharing will advance faster than those who did otherwise. Furthermore, more and more workers will be willing to travel in order to seize the opportunity to apply their knowledge and betterment of their lives.

Recent trends of migration of highly skilled professionals and impact on economic competitiveness of countries

The IOM 2015 report states that, in all regions of the world except Europe people tend to have a favorable view of migration than unfavorable. More than 51% of world migrants live in 10 countries and one in the fifth of all migrants live in the 20 large cities around the world. In 2015 the top 10 countries with the highest share of migrants were USA (46,6millions), Germany (12million), Russian Federation (11.9million), Saudi Arabia (10.2million), United Kingdom (8.5million), United Arab Emirates (8.1million), Canada and France (7.8million) and Australia (6.7million) and Spain (5.8million) and the top 5 countries with the highest number of diaspora population were India, Mexico, Russian Federation, China and Bangladesh.

The proportion of foreign-born varies in different countries Gulf states constitute the highest foreign-born population than any other globally. The United Arab Emirates, Qatar, and Kuwait consist of 88.4%, 75.5% and 73.6% of the foreign-born population respectively. While the proportion is 10% on average for Europe; furthermore some countries in Northern and Southern Europe have higher number of migrants (17.5% in Austria, almost 17% in Sweden, and about 15% in Germany) in North America the population of USA consists of 15.2% foreign-born while in Canada the size is more than 22%; Australia's population is 28% foreign-born (IOM, 2015).

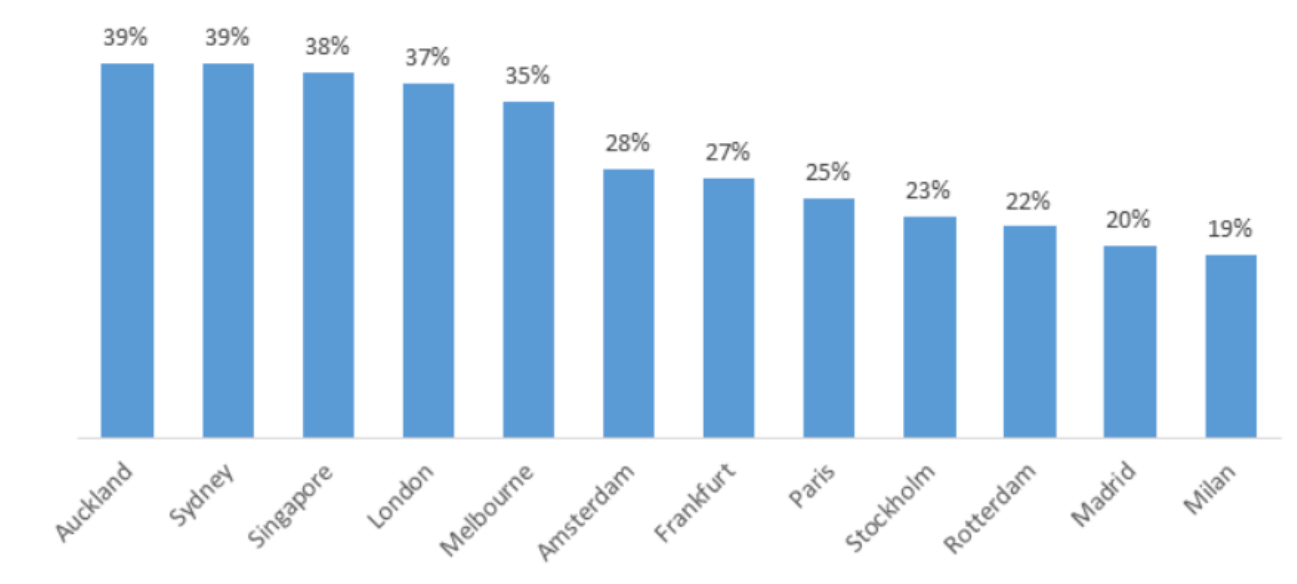


Figure 1 Foreign-Born Population in Major Cities, source: IOM World Migration Report, 2015

“The demographic changes that we see occurring in many of the regions where we operate – shrinking populations, an aging workforce and diversifying demographics – compound the challenges we face and intensify the war for talent.” Dr. Rüdiger Grube Chairman and CEO, Deutsche Bahn AG, Germany (Daanen, Hans & Facer, 2007). Researches made by leading sourcing and consulting firms define the migration of highly-skilled from one company to another or globally as a “War for Talent” (Beechler & Woodward, 2009; Carter, 2011; Daanen, Hans & Facer, 2007; Michaels, Handfield-jones, & Axelrod, 2014; Sourceright & Report, 2015) the trend in the USA is that the economic growth pushes the demand upwards while the supply is showing the other way round, firms are suffering from a shortage of executive talent “women are no longer surging into the workforce, white-collar productivity improvements have flattened, immigration levels are stable, and executives are not prolonging their careers” (Carter, 2011) furthermore, the KMPG report sums the main reasons of talent and skill shortage as “generational” the declining interest in roles which are considered traditional and the trend of considering oneself as a “free agent” by young skilled workers for which the management has no proper

tool of managing it; and the inability to foresee and train workers for emerging roles (Michaels et al., 2014), skill shortage at present and developing the talent needed for future (Daanen, Hans & Facer, 2007) when it comes to competitive of a company or an economy studies prove that human capital acquisition has a positive impact on the competitiveness of an economy. “Countries that facilitate the free movement of labor are more likely to become the most economically competitive” (Daanen, Hans & Facer, 2007). Politicization of immigration is a problem for business. The most recent example shows that a temporary entry ban due to security reasons (according to the Trump administration) has brought global companies like Apple, Amazon, Microsoft, Uber etc.... to name the few on their feet. Beyond the solidarity they showed towards human rights they have also loudly expressed their concern on the impact the politicization of immigration could bring on their businesses. “Innovation happens in an unrestricted environment that respects ideas over borders” (Wasik, 2017) preventing top talents from entering a country will impact an economy inevitably.

A report by PWC (PricewaterhouseCoopers) “Talent mobility 2020 and beyond” illustrates the challenges which will be faced by companies globally. The shortage of skilled workers and rise of global players from emerging companies in addition to the demographic changes and aging population will be a tough war to fight for companies from matured economies. The shift in business arena to developing and emerging markets to the east and expansion of global multinationals from emerging market are already challenging those from the west. The location of where to do business will depend on the demographic shift. In 2050 the urban population is expected to grow. And total population growth is expected to change drastically over the coming decades in developing and emerging markets. Urbanization means a lot of business opportunity. From construction to growth in consumer goods; China, India, and Nigeria alone are projected to contribute 37% of the total projected population amounting to 2.5billion people in urban inhabitants (United Nations, Department of Economic and Social Affairs, Population Division, 2014). Countries shown in figure 2. Show only those countries contributing more than 25million. Those contributing less than 25million are included in “Others”.

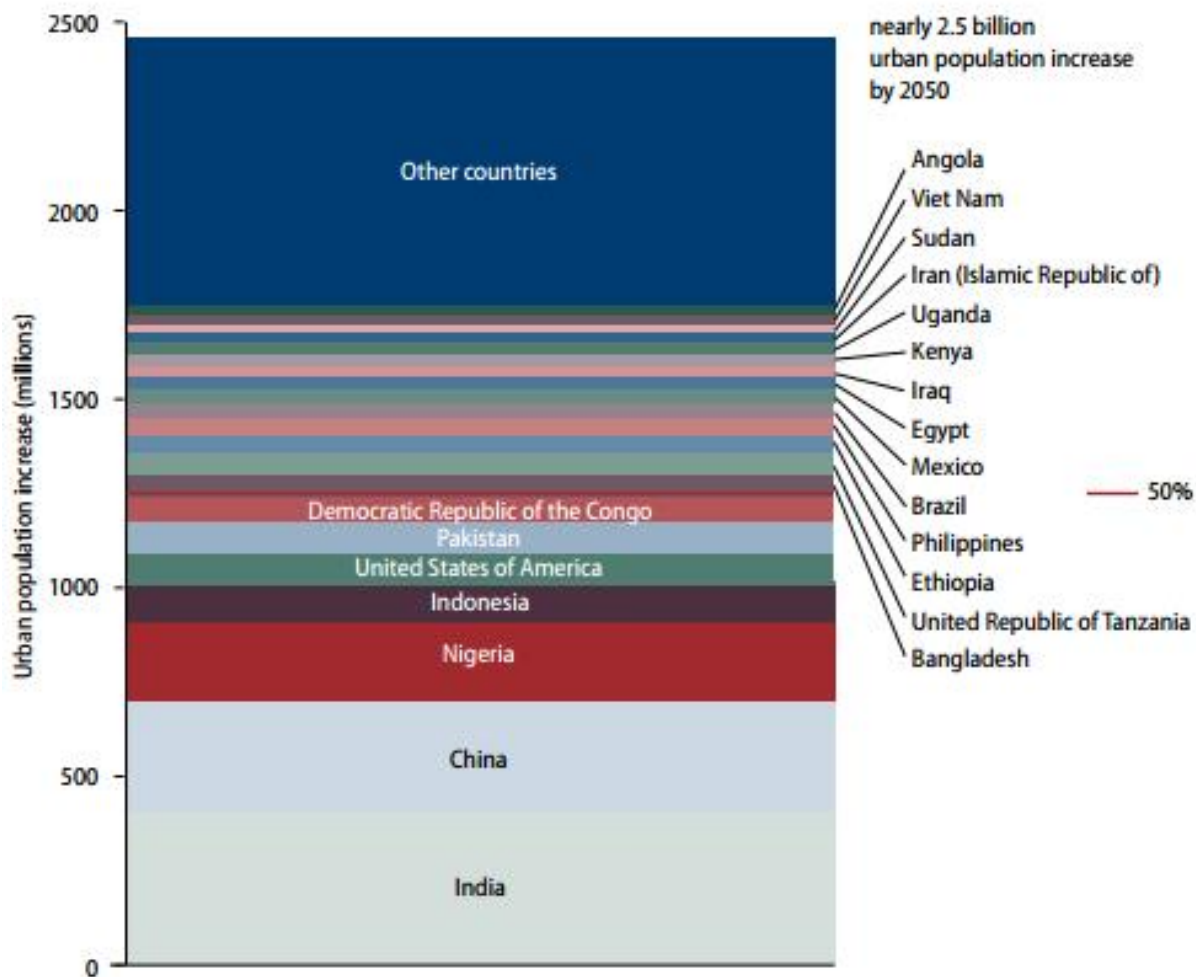


Figure 2 Urban Population increase by country 2014 to 2050, source: UN, Department of Economic and Social Affairs 2014

The interplay of global development, labour market development, and migration

The global labor market situation remains uneven and fragile (IOL, 2014). Despite the positive sign of economic growth in developing countries and recovery in developed economies since the financial crisis of 2008, the labor market is still not sufficient to absorb the challenge faced by the labor market as a result of the market imbalance. According to ILO, in order to meet the growing demand for a job by new entrants, every year generation of 42 million jobs are needed. Lack of financial access or limited access to credit for sustainable enterprises, notably small ones, affects productive investment and job creating decisions.

Developing and emerging economies are facing a slowdown in a rapid growth, lack of infrastructure and shortage in the human capital pool plays a significant role as a barrier from catching up with the developed economies. For economies which are dependent on export, the fall in global demand impacts the whole economy, forcing them to suffer not only from the decrease in demand but also from the volatile inflow of capital. For developing countries like Ethiopia where the trade balance is negative,

exchange rate depreciation due to market volatility affects trade in a negative way, even if export has to increase due to the weakness of the local currency; for economy so dependent on import, the soaring price of imported goods makes the life of a random citizen or local business very difficult higher than 20% inflation in 2012 and nearly 15 billion dollars in trade deficit in 2015 (Michigan State University, 2017) (The World Bank Group, 2017). The study of migrations' impact on growth has gone beyond the study of international remittances and urban-rural migration to a wider spectrum study including “human capital investment, global diaspora networks, circular or temporary migration, and the transfer of technology and cultural norms” (Clemens M, 2015).

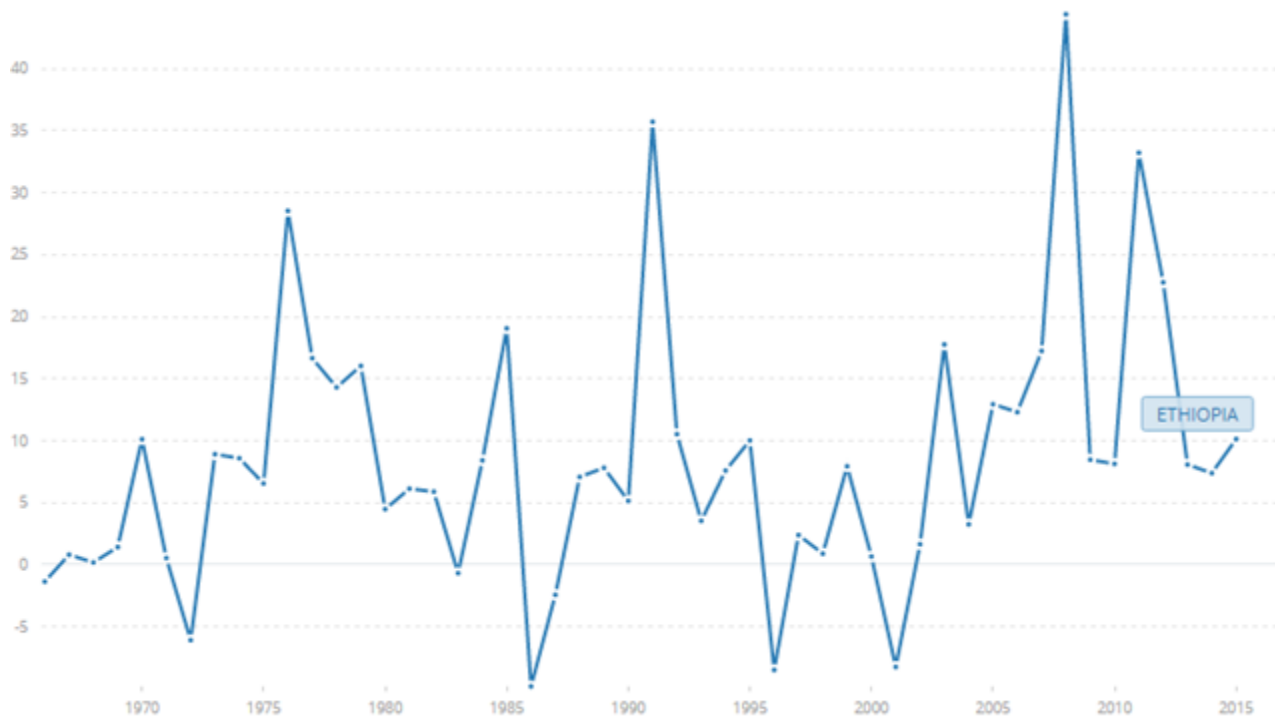


Figure 3 Inflation driven consumer price volatility the case of Ethiopia, Source: The World Bank Group 2017

Drivers of unemployment

According to researchers, a decrease in demand leads to a decrease in trade and development; which latter leads to unemployment and high unemployment leading to migration. Migration is a complex study area nevertheless economics would elaborate this phenomenon as a demand and supply shift. Technological change is also the main driver of structural unemployment; as a consequence of shifting from manual labor consuming process to more automated and efficient system. The tendency of moving business activities and processes have resulted in skill mismatch to the jobs available in the labor market (Supervised & Gooch, 2007) (Titan, 2012). Even if productivity rises due to efficient process with technologies which leads to higher productivity and output everything being equal leads to growth the relationship with the labor market may not be the same. Having that in mind, market development of growth does not always lead to labor market development.

Unemployment rates of various markets

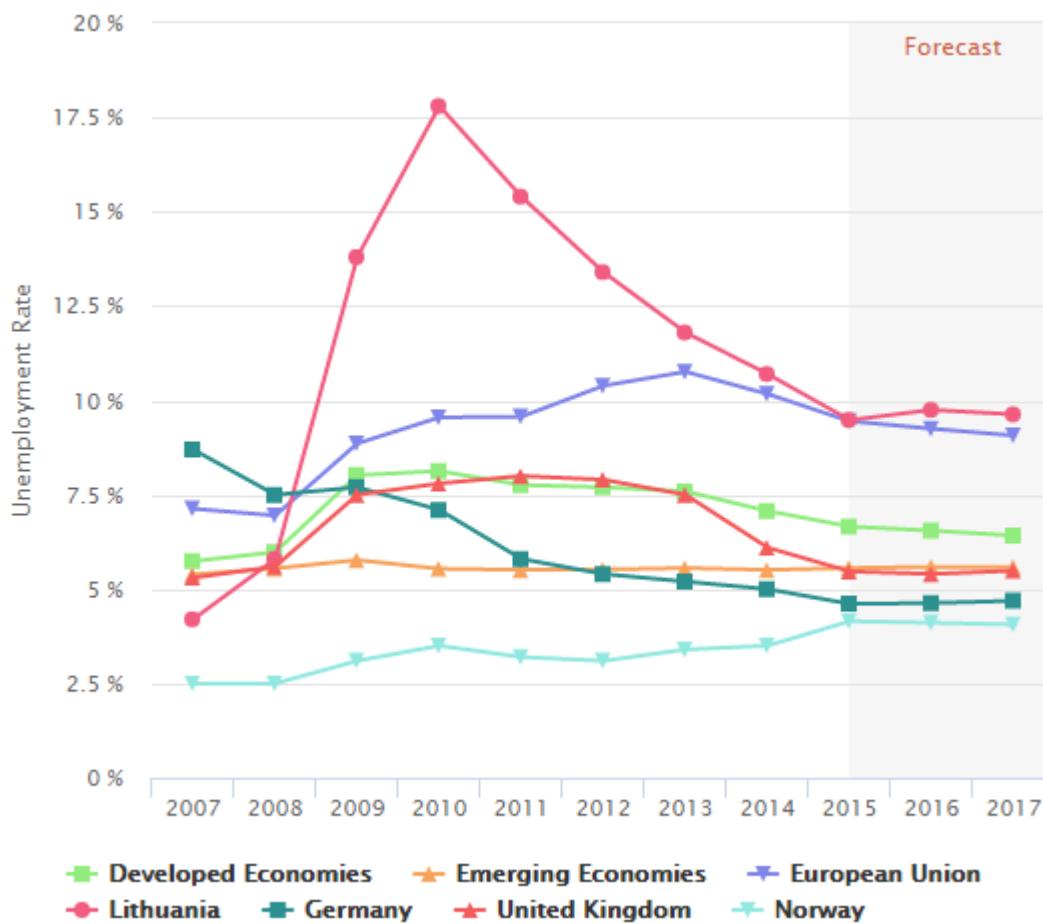


Figure 4 Unemployment rates of various markets, source: ILO 2016

Based on the 1930's Keynesian theory of unemployment, Jensen identifies three types of unemployment; cyclical or demand-deficit unemployment where employees believed to lose their job because of the lack of demand. Demand-deficit unemployment can be resulted by recessions and can also impact the market recovery term. When the demand in the market falls, the revenue earned by enterprises will decline less spending because of lack of consumer confidence will lead to less investment, which could trigger shrinking in production which forces companies not only to cut wages but also lay off employees; the most recent example can be 2008 global recession (Jensen, 2008), the Euro Zone crises 2012 (Archick & Mix, 2012). The second type is called frictional unemployment, it exists in all markets where because of several reasons people move from one workplace to another. Kimberly Amadeo grouped the causes of frictional unemployment into four; when a person has food savings and can afford to quit unfulfilling job and start looking for the job he/she think is best, when one quits one's job and move to a new location, city etc.. for no reason, and the time spent looking for a new job the person is considered unemployed, first timer job market entrants after finishing school or higher education institutes is considered

unemployed until they find a job and the last one is after a break person re-entry to the job market (Amadeo, 2017). The third cause of unemployment is called Structural unemployment (Jensen, 2008) which is caused due to technological change and moving jobs abroad as a result of outsourcing (Amadeo, 2017).

Despite continuing risks, a modest recovery has occurred in 2013 in the developed world, which has strengthened global economic growth in 2014. However, at current levels, growth is too weak to significantly improve the situation of workers worldwide. In many economies, particularly in the euro area, GDP levels are still far below the levels observed before the crisis, which is reflected in high unemployment figures. Some developing and emerging economies are lagging behind the economic growth rates observed in the past decade, resulting in slower poverty alleviation. Decent job creation slowed almost everywhere in the world, with a significant deceleration in both wage employment and industrial employment growth. In addition, the average unemployment duration increased in many countries. Unemployment is expected to rise by 1.1million globally in 2017 alone (ILO, 2016). Significant policy action is urgently required to tackle the key factors that prevent labor markets worldwide from recovering. In this respect, the indicators provided in this Global Employment Trends report allow an analysis of progress and areas of interventions to promote more and better jobs around the world.

In order to improve the competitiveness of a country in the global market, labor productivity and economic growth are the two key factors (Auzina-Emsina, 2014). It's said that the decline in economic output was accompanied by a fall in employment growth and a rise in unemployment (Downes, 2009). The reason for a decline in output might vary from economic crises, fall in demand, political embargo leading to trade restriction, to a decline in the productivity of an existing labor market. The global economic recession has had differential effects on different countries, with some being able to stand the crisis better than others. The labor market of Germany as an example, at the time of the crises, remained almost the same. And Lithuania recovered faster than most EU member states. Germany's business enterprises decision to move low-skilled intensive jobs to the developing countries had helped the country to revive growth in 2006 after many years of stagnations and low economic performance and high unemployment. As a result, i) German brand products became more competitive in the global market, raising the export but the action of moving production to less-expensive labor cost offering countries in Central Europe made the situation even worse in Germany by ii) increasing the unemployment rate. The more unemployed labor in the market the cheaper it gets to hire. iii) Low wages for unskilled worker drove the gap of economic inequality.

Because the outcome of this action created a negative impact on growth i.e. high unemployment rate and; even if it was beneficial for enterprises. The German government has introduced Hartz, a reform which

promotes low-skilled low-pay jobs in non-tradable services. The Economist has listed this reform concept as “sanction and Support” (The Economist, 2004). This policy has reduced unemployment, but this has come with the increase in non-standard employment and with growing inequality and in-work poverty. Finally, the increasing demand for German goods due to higher competitiveness has subsequently boosted production in the segments located in Germany, implying a further increase in employment. Compared to other advanced economies, Germany displays two noticeable characteristics: The recession that followed the 2008 financial crisis has had a low impact on unemployment which has almost not increased in 2008– 2009 (Beissinger T., February 2016).

When aggregate demand falls in the commodity market, we can say that that is the effect which a global financial or economic crises shows. And in principle on the national level, the impact of economic crisis manifests through an increase in the unemployment rate and a decrease in employment.

The decline in economic activity creates two effects in the labor market: an added worker effect when persons within the household enter the labor market as the main breadwinner(s) is(are) laid off and a discouraged worker effect when a person is discouraged from looking for a job as a result of difficulty to find any in the labour market. While the later reduces the labor participation rate, the added worker effect increases it. In addition to that, during a recessionary period, school, university, college graduates who are new workforce entrants find it difficult to get jobs.

Unemployment and Poverty

Center for economic and policy research (CEPR) states that most economists agree on the unemployment rate of 5-5,5% as ‘natural’ unemployment rate as 100% of employment leads to an inflexible labor market where employees will not have a chance to move from one job to another. Nevertheless, high unemployment rate or a decrease in working hours leads individuals into poverty by pushing the household income below the poverty line.

	Unemployment (millions)			Unemployment rate (per cent)		
	2016	2017	2018	2016	2017	2018
WORLD	197.7	201.1	203.8	5.7	5.8	5.8
Developed countries	38.6	37.9	38.0	6.3	6.2	6.2
Emerging countries	143.4	147.0	149.2	5.6	5.7	5.7
Developing countries	15.7	16.1	16.6	5.6	5.5	5.5
	Vulnerable employment rate (per cent)			Working poverty rate (per cent)		
	2016	2017	2018	2016	2017	2018
WORLD*	42.9	42.8	42.7	29.4	28.7	28.1
Developed countries	10.1	10.1	10.0	--	--	--
Emerging countries	46.8	46.5	46.2	25.0	24.3	23.7
Developing countries	78.9	78.7	78.5	69.0	67.9	66.7

Figure 5 World unemployment factual and projected Source: ILO 2017

The interdependency of economies today is bigger than ever the decline in economic growth in one part of the world impacts the flow of FDI, remittances, temporary work opportunities etc. Downes has stated that the impact of global recession has affected the Caribbean in 2007-2008 through a slowdown in exports, a decline in the number of tourists from recession hit (developed) countries, a decline in temporary migrant workers, in addition to these the decline in remittances has continued up until the economies of North American countries started to recover. Before the recession hit many developing countries several small developing countries have went up the ladder of UNDP's Human Development Index to the direction of Millennium Development Goals (MDG's) set by the United Nations; unlike the stagnation as a result of the global crisis and interconnectedness of markets (Downes, 2009).

Unemployment and migration

The relationship of migration and unemployment can be both direct and indirect. Emigration can both increase and decrease unemployment. In the first case because there is no suffering from financial loss the unemployed could move from one country to another reducing the number of unemployed in the country of origin, while at the same time the inflow of remittance sent by emigrants to their country of origin widens the income gap and may create long-term unemployment because people who receive remittances prefer to remain unemployed because they could live better on remittance than those who are working (K. C. Zachariah, 2015). The 2005 OECD publication stated that in the case of highly skilled migration the study has shown no strong correlation between the migration of highly skilled people and unemployment. Nevertheless, it states that developing countries are not only affected by highly skilled migration but also benefit from return migration, technology, and know-how transfer, enjoy newly developed networks etc. (OECD, 2005).

Migration is an inevitable a phenomenon which is inseparable when discussing global labor market development and economic growth. Because markets are driven by supply and demand, workers from countries where Labor is in surplus, high unemployment or underemployed and low-wage move to scarce labour and high wage countries to restore equilibrium. Even if the individual reason for migration is different for migrants and migration is a continuous phenomenon, demand and supply will be interdependent and the conventional rule of economics remains as one of the reasons to explain why international migration occurs (Bach, 2007).

Furthermore, unemployment will remain as one of the global challenges despite the decline in the unemployment rate in regions like Europe and Central Asia. The main causes according to ILO 2015 are the increasing number of structural unemployment, youth unemployment. These problems cause long-term unemployment, in emerging and developing economies. In addition to that, the number of people

taking on informal employment, vulnerable employment and those living in working poverty has continued to rise (ILO, 2015).

Even though the relationship between economic development and unemployment is not straightforward, the research made by ILO shows that the change in economic development at the time of global decline in market development has fueled unemployment further adding 27 million more unemployed people to pre-crisis level. In 2015 the number of unemployed globally has reached almost 200million. These increases in the number of unemployed happened mainly in emerging and developing countries. In 2005 most developed economies has shown a decrease in unemployment mainly in North America and some in European countries. Nevertheless, economies which were dependent on crisis hit emerging economies were impacted by high unemployment given an example of Southern European countries packed by the slowdown in emerging Asian economies (ILO, 2016). Pettinger, also states that at the time of an economic boom because of an increasing number of job vacancies and hires by enterprises, unemployment falls. As a result of high labor demand, the bargaining power of employees for a better wage is high. The rising demand forces firms to hire more in order to meet the ever increasing requirement of the market. The phenomenon of rising wage can manifest even before full employment is reached due to market imperfections. The demand for some skills can be difficult to fulfill due to the lack of specialists in that area and such situation in the market pushes wage levels in that sector. Especially for labor intensive sectors, this could lead to decrease in overall productivity and towards less competitiveness as a result of high labor cost and increased export prices which might lead to a decrease in export (Pettinger, 2016). The challenge faced by small developing countries arises from a decline in export of goods and services (due to a general decline in demand globally), the decline in remittances, access to international financial credit and foreign direct investment. Especially for small and developing countries, the economic growth is very much dependent on how good the labor market is. In order to build a firewall around small open developing economies well-tailored economic and social policies are necessary (Downes, 2009).

Due to globalization, governments today face greater international interdependence of their economies. Like companies, they need to “think global”; so that national policies fit within an international context (Supervised & Gooch, 2007). Research has proved that migration increases innovation in addition to that emigration of high-skilled and medium-skilled influences a push in wages upwards in origin country, Dustmann has proven this theory on the impact of emigration from Poland has which has influenced a wage increase for the remaining high and medium-skilled workers in Poland because of the decreasing human capital of that particular group (Dustmann C, 2015).

The impact of immigrants on trade relations and trade relations on migration

There is a relatively large literature that considers the two-way interaction between international trade and international migration a study proved that, immigrants with high- and medium level of education in Spain and those engaged in business activities have an impact on bilateral trade agreements with their country of origin and this impact was positive (Blanes-Cristóbal, 2008). Cyrus 2012 argues that trade reduces the distance between cultures he also adds that the cultural distance between two nations may increase or decrease over time (T, 2012), the market culture of countries under soviet times was different from today's more liberal market in the Baltic States, culture does change over time in relation to market policy, cultural and consumption exposure of the society.

Culture does change, possibly in response to exposure to the foreign goods, methods, and ideas brought across borders by trade; the cultural "distance" between two countries can, therefore, be seen to fall or rise over time immigrants with a medium level of education and those related to business activities are the ones who have a positive effect on bilateral trade. As a matter of fact, the cost of the trade is determined by the geographic distance, psychic distance, availability of infrastructures and other fixed costs for instance: the cost of obtaining cultural nuances, knowledge of the foreign market, communication cost including language and trust etc. By employing an immigrant from a particular country enterprises could reduce their international business expenses. Immigrants benefit not only international enterprises as facilitators between their destination country and country of origin Increasing international trade but also vice versa, being in foreign country, due to their habits and preferences they start to buy goods from their country of origin(that helps create import channel to the destination country) impacting international trade, their income in destination country enables them to afford goods from their country of origin and especially if there are entrepreneurs who are immigrants from their countries, in addition to these, immigrants can influence domestic firms to produce substitutes which are relevant to the consumption habits of the immigrants (Çagatay, Genç, & Koska, 2013)(Genc, Gheasi, Nijkamp, & Poot, 2012).

Perhaps some researchers state that migration can neither be blamed for a lack of development nor be expected to trigger 'take-off' development in generally unattractive investment environments despite their benefits for individuals and communities involved. De Haas argues that if the emigrants from origin countries are the wealthy and highly educated and government fail to make policy reforms migration might create remittance dependency but not bring about development which will lead to disinvestment and authoritarianism. Nevertheless if, structural 'development' conditions take a positive turn as a result of reforms in political and economic areas making migrants want to capitalize on new opportunities to the extent of making a return decision (de Haas, 2014a).

De Haas also confirms that, based on past studies especially in poor societies, economic transformations through the development and increasing incomes, improving education, infrastructure expansion would ignite increases in migration. Research made by several researchers over several decades explain that this phenomenon happens in a hypothesized sequence in which international emigration takes place as a result of a spill-over where first people move internally(rural-to-urban). He also states that when countries become rich with a high standard of living, emigration decreases and immigration increases. At the same time saying the wealthier a society the higher the mobility and migration Zelinsky in 1971 hypothesized this theory which later has been confirmed by other researchers (De Haas, 2008) (de Haas, 2014a)(Kurekova, 2010).

Some researchers believe that migration of highly-educated people from developing countries tends to depress income levels and long-run economic growth rates in the developing world. This conventional view, however, has recently been challenged by the following argument. In a developing economy with a limited growth potential, the return to human capital is likely to be low. As a result people are not motivated to get higher education due to the limited opportunities even though it's the driver of economic growth. Hence, knowledge has a great value in the global arena allowing the highly-skilled migrate from developing countries may actually motivate those who remain to get education as a key to success. Because the number of highly-skilled emigrants from a particular country will still remain a fraction of the whole it will still raise the average level of education for the remaining part of the population (Adams, 2003).

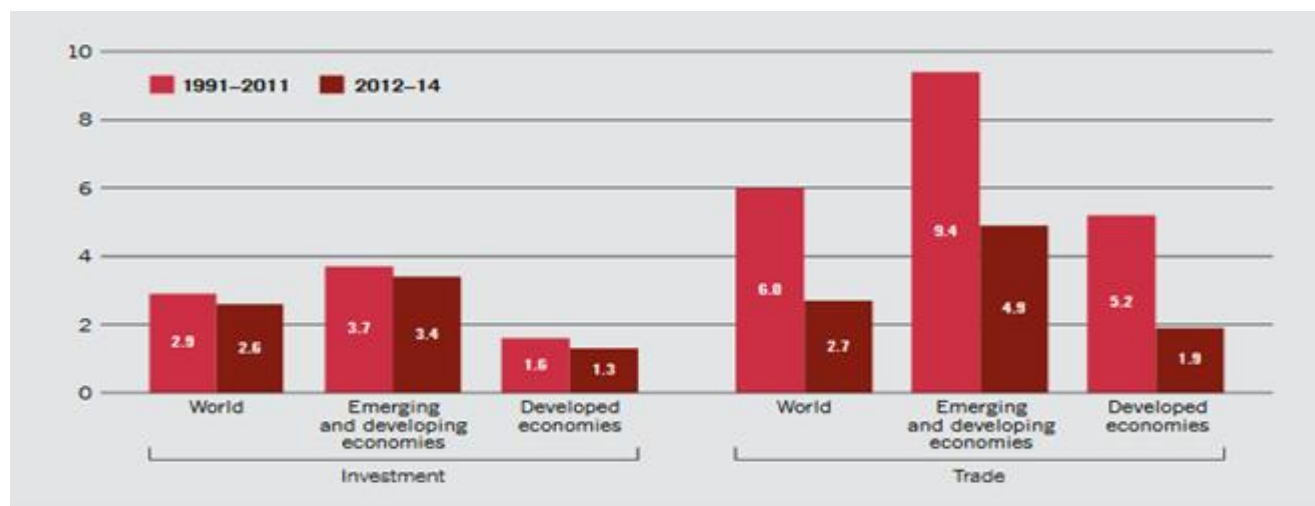
1.1. Factors Driving the Global Economic Growth

After the global financial crisis, which the world is still trying to recover from. The decline in capital investment, rising youth unemployment, the continues fall in working age population, demographic changes, environmental crisis, regional political instability, illegal migration and the refugee crisis are the problems the world is facing to name the least. The global economic growth has slowed down compared to pre-crises period. The slowdown has occurred as a result of a decrease in export due to weak demand, falling commodity and oil prices, and high unemployment. This has dragged down developing and emerging markets down. The fall in demand of goods from developing and emerging had a counter impact on the demand for heavy machineries and equipment from developed countries in developing and emerging markets (ILO, 2016) Building a good investment climate and empowering people are the two pillars of development contended by the world bank. The World Bank argue that “competitiveness and economic growth reduce poverty” but in order to achieve that countries must implement policies with regard to the pillars. Good investment climate attracts private investors to put their money to work and

that creates jobs whereas empowering the poor and investing in them helps them to join the move for economic growth (Rondinelli, 2003)

Long-term Capital Investment Decline

When consumer confidence is low people tend to save money than invest. Even if saving is growing globally the need for long-term investment is not fulfilled. For that matter, for growth necessary investments like investment on infrastructure remains unmet. This behavior came as a lesson learned from the credit crunch. Nonetheless, the indication of decline did not come alone but rather coupled with a decrease in trade World Employment Outlook 2016 shows that in the period of 2011-2014 trade has declined almost double the size from year 1991-2012. Reduced capital investment which affects total factor productivity in both emerging and developed regions. Furthermore labour productivity remains very low in many regions.



Note: World trade refers to world imports of merchandise, whereas investment refers to gross fixed capital formation. Both series are measured in US\$ at constant prices (2005) and constant exchange rates (2005) in millions. Data for 2014 are preliminary.

Figure 6 The change in trade and investment growth rate globally, source: ILO, 2016

According to the ILO report, one of the major factors for global economic slowdown is weak global aggregate demand (ILO, Oct 2014). On the other hand, growth can be driven by an increase in aggregate supply this requires an increase in the long run aggregate supply (productive capacity) as well as aggregate demand. Growth in long run aggregate supply can be caused by: Increased capital. E.g. investment in new factories or investment in infrastructure, such as roads and telecommunications; increase in working population, e.g. through immigration, higher birth rate; Increase in Labour productivity, through better education and training or improved technology and innovation; Discovering new raw materials; Technological improvements to improve the productivity of capital and labour e.g. Microcomputers and the internet have both contributed to increased economic growth (Pettinger, 2016).

Slowdown in the growth of working-age population

Stagnation is felt not only in the area of economic development, but also the rapidly aging population in developed markets and slower working-age populations' growth in emerging and developing economies require a quick policy response. As a result of this phenomenon, output expansion and employment growth is constrained. The income imbalance between the rich and the poor is also a matter of concern. Pay gap for women is also part of the problem creating income inequality and that's worse in emerging, developing and under developed countries, some developed countries have taken the initiative to draw policy to resolve this issue. The richest 10% own from >20% ->35% total wealth when that figure is not close to 5% for the poorest 10% even in developed economies. Millions of people live in working poverty around the world.

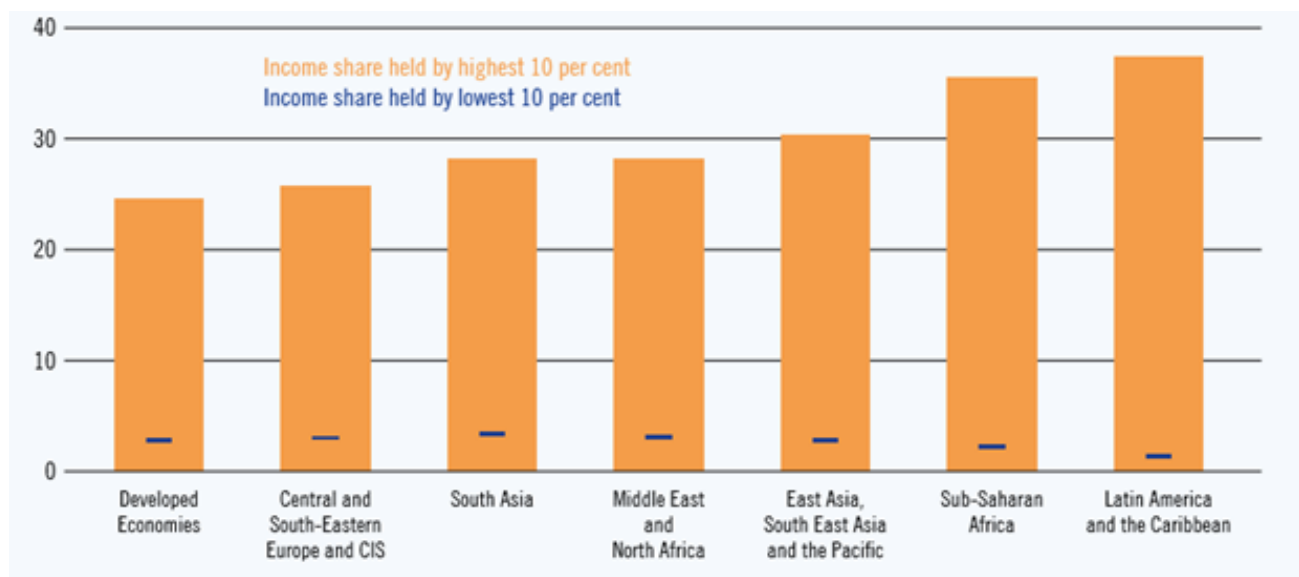


Figure 7 Income distribution: Richest 10 percent vs poorest 10 percent by region for the year 2011, source: ILO, 2015

1.2. Regional Challenges with regards to migration and economic development

Brain drain is regarded as the major negative impact of migration of the highly skilled. It creates a scarcity of skilled people as they tend to leave for wealthy countries (Chimboza, 2012). More on brain drain controversy look at (Supervised & Gooch, 2007). The second impact on source country is the loss of investment on education, the source country provides education and all other infrastructure related to the development of the specialist, some profession like medical doctors, engineers and pilots cost a lot for the source country. The third negative factor can be the brain waste, when a skilled professional leaves the source country and end up in secondary sector in the destination country; as a result of language barrier, different requirements for a particular profession, lack of applicability of one's knowledge in destination country, more on brain waste (Arslan et al., 2014) But on the other hand many researchers

argue that migration of highly skilled professionals benefits source countries. The argument suggested that through the inflow of remittances not only lives of family members, change but also it brings real development to the source country with the right policy in place (Brown & Jimenez-Soto, 2015)(Taylor, 1999).

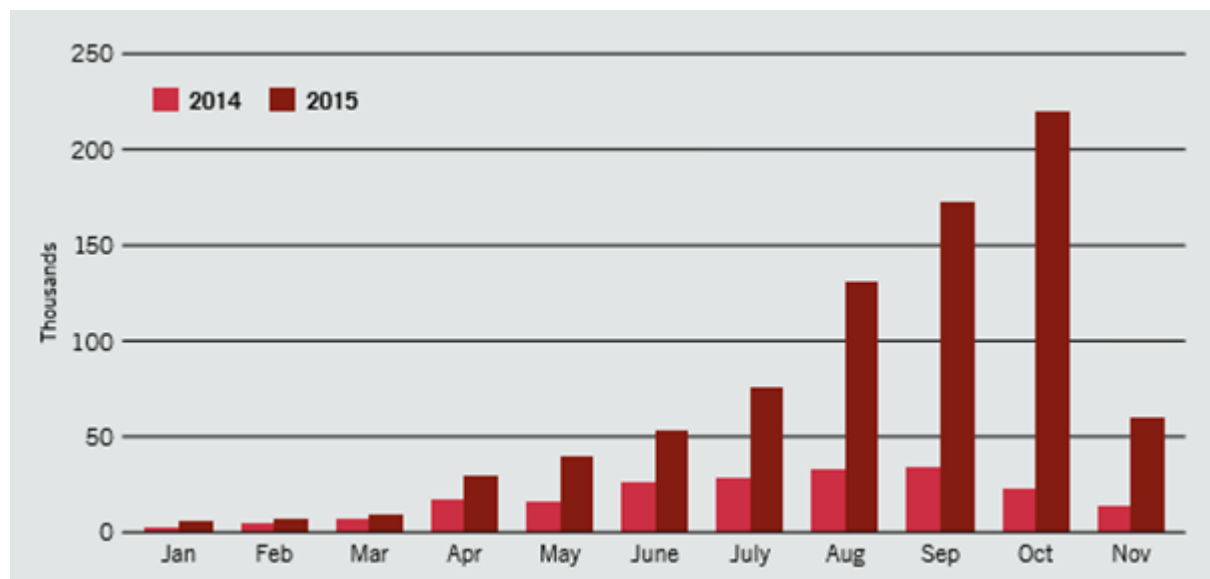


Figure 8 Refugees' influx to the EU via Mediterranean Source: World Employment Social Outlook, 2016

The size and scale of refugees influx poses a huge challenge to the EU, it needs an extraordinary policy response by law makers. Even though, migration helps to bridge the gap by the labor market other factors in relation to the refugees' expectations, experience and skill and culture will be a challenge for the destination country when trying to integrate. Even though the highest attention is given to the impact which migrants impose in receiving countries, rather than sending countries, the phenomenon that migration has is a both way effect, both receiving and sending countries are affected by it. Is migration a challenge only for the developed world? Are countries which are left behind impacted in a positive or negative ways? Is there a direction or a cause of flow from one country to the other or a region to another? Researchers believe that emigration can be a blessing or a curse for migrant supplying countries: A blessing because it increases the inflow of remittances, flow of know-how, new business or trade contacts etc. and a curse because it impacts the human capital of the country by taking away the highly skilled people. It is also believed that the migration of highly skilled motivates others to pursue higher education (where some researchers believe in the contrary "*The brain drain reduces learning opportunities in the South and exacerbates cross-country technology differences*" (Sampson, 2013)", as it is taken as a get way to a better life and that increases literacy rate. The example of Taiwan also proves that through migrant networks and return migrants (reverse brain drain)(EU, 2016), bridges can be built which serves as knowledge sharing mechanism, today India, China and Philippines are benefiting from their migrant

networks through remittances as they are leading remittance receiving countries (Brown & Jimenez-Soto, 2015), remittances believe to have macroeconomic impact by fueling a mild growth in the economy, it also reduces poverty and improves millions of lives globally, for some countries (Moldova, Bosnia, Albania, Herzegovina) remittance inflow is as big as half of equal to their export (World Bank, 2006). Even if the right amount of remittances sent to developing countries amount is unknown, due to the fact that migrants use informal channels to send money to their source country, the world bank estimates that in 2016 the estimates amount sent to developing countries was 429 billion dollars and 240 billion in 2015, this amount is believed to be higher than the money flowing as an aid from developed countries, and more stable flow than other capital inflows. In 2017 the flow of remittances is expected to grow to 444 billion dollars (World Bank, 2017) and that makes remittance play a major role in development even if the impact in fueling economic growth is not easily proven. The remittance sent to developing countries in 2007 was \$240 billion, and it has almost doubled in 10 years (OECD, 2009).

The diaspora network around the world is also playing an enormous role in developing trade ties with their source countries and also help their host countries find partner by reducing the communication cost which otherwise would be expensive (OKOH, 2010). Genc et al, describes the contribution and impact of migrants on development of international business not only through macro-economic perspective for country of origin but also, the impact of emigrants on their destination country as influencers in building bilateral trade ties not only with their country of origin but also other countries with no or small psychic distance, due to their understanding of culture, customs of business, regulations etc. (Genc et al., 2012). However a study conducted by Beine et al argues that “countries combining relatively low levels of human capital and low skilled emigration rates are more likely to experience a beneficial brain drain (net positive effect) and conversely. There appear to be slightly more losers than winners.” (Beine, Docquier, & Rapoport, 2008a) furthermore, migration of health care workers and other highly skilled could have a dire impact not only by decreasing the human capital pool but it can also lead to “*an increase in political instability*” (F. Docquier, Lohest, & Marfouk, 2007) in sending countries, more on brain drain see (Record & Mohiddin, 2006) (Frédéric. Docquier & Rapoport, 2006)(Record & Mohiddin, 2006) and Montford and Rapoport warn that their research on the current trend of skilled migrants flow from developing and underdeveloped countries to developed economies (brain drain), in the long-run creates income inequalities in the world unlike the today's indicators of decrease in income inequalities (Mountford & Rapoport, 2011) (Easterly, March 2008) (World Bank, 2006)(Rizvi, 2016)(Faini, 2007).

1.3. Migration in the context of Business Internationalization

International migration topic is one of the most controversial issues discussed in many fields from sociology to economics, and politics to human rights and religion. It impacts every corner of the world.

It has influenced cultures through diversity and development through integration and know-how sharing. It has also led countries to come together to address the issues related to migration crisis globally. Migration has become an inseparable phenomenon when human capital management, brain circulation, brain drain, international business is discussed. And today migration has become the treasure for countries facing labor shortage and nightmare for small and high emigration countries with demographic change and aging population.

Countries which are investing in education later to lose their human capital to more developed capital-rich countries not only suffer from brain drain on one hand but also enjoy remittances and brain circulation as well as knowledge spillover on the other hand. Country's competitiveness has become one of the most important factor in developing international business and also attracting investment (FDI) to it. And one of the measurements for competitiveness is the quality and quantity of human capital an economy possesses. Without a doubt when it comes to migration or migrant friendly policies, there is always the idea which backfires whether sovereignty, nationalism, protectionism, national security issues or the like, there will always be those who are for and against freedom of movement.

Even though, we hear a lot of negative generalization of migration in the media it's clear that there are many countries who are migrant dependent on many sectors. OECD countries, especially the developed economies are dependent on migration to fill in the gap in the labor market as well as the challenges faced due to aging population, low birth rate etc. One third of the total immigrants coming to OECD countries are highly skilled, majority of them are from developing countries (Beine, Docquier, & Rapoport, 2008b) furthermore, the number of immigrants to the OECD has doubled since 1970s'. Migration is part of the human history for centuries, people have been and will be moving on search of a better life. Nevertheless, migration has become the phenomenon of the century, because of the driving force which is moving people in large numbers; i.e. political instability in Middle East and North Africa, labor migration in Asia, freedom of movement among EU countries resulting in East-West migration in search of better quality of life and social guarantees. Therefore the migration rate is unlikely to fall in the near future, furthermore countries need to look ahead and forge a strategy in order to stay balanced in these uncertain times. ILO is trying to come up with policies to tackle challenges arising from international labor migration. Unfortunately, due to differences in policies in national level there is no one perfect solution to all the challenges faced by independent states nor does one size fits all policy work. The challenge is creating the right kinds of policies to get the best outcome for both countries of destination and origin. Business will always follow the reward, the question is how can one country offer more carrots to international business enterprises than others? And what can a country do to remain competitive in the long-run and secure a sustainable development?

According to ILO 2013 report more than 74 percent of labor migrant workers reside and work in high-income countries while the number of migrants living in middle-income and lower-middle income countries is 23 percent. The number labor migrants in low-income countries is only 2.4 percent. Most labor migrants work in service sector 71% and other industries like construction and manufacturing employees 11.7% And agriculture 11.1 % (ILO, 2015). It's believed that there are almost 35million migrants in OECD with tertiary education, furthermore, migrants are more and more becoming highly educated. Due to the inflow of migrants from Asia, Africa and Latin America the number is expected to increase by 70% (Arslan et al., 2014).

Problem in the labour market is manifested not through high unemployment rate, but rather underemployment hidden under self-employment. The Labor market has also dualistic economic structure, which is categorized as the formal and non-formal employment categories. First the formal segment provides a very minor guarantee or assurance regarding the continuation of employment, therefor even though people are employed that are still in a risk of losing their jobs. The second is in case of the non-formal segment people can suffer from working poverty and underemployment, even if labor participation is high.

In the past labour market flexibility and liberalization has been able to bring market to full employment, through part-time job which has substitute unemployment. Nevertheless, today market liberalization has created the way to offer low-paid part-time jobs facilitating for employer to pay per performance or pay more for seniors. Therefor economies must weigh in the pros and cons of labor liberalization. Due to deindustrialization, and policy changes to moving from industrialized industries to service industries, structural unemployment is increasing globally. Technological changes and skill-based specialization has made low-skilled workers in advanced industrial countries difficult to fit in to labor market, and policies to retrain and return them to the labor market is needed.

National and international policy responses must be designed to address the challenges facing the labor market with ever increasing socio-political challenges. Global solution to the 46million labour market entrants is necessary as lack of secure and productive jobs is hitting on almost all regions globally. The other thing to keep in mind is rethinking policies is as important as the dynamism of the problems the world is facing globally.

International policy response is required for in developing countries in order to address the imbalance in resource distribution, and that could improve employment situations in those economies. International policies must address two areas of concern, first to create a tool to manage brain drain resulted from international migration of highly skilled from developing countries and transform it to brain circulation and the second policy response is needed to address problems facing employment because of the lack of investment to job creation.

Developing countries must change the strategy of their growth and labor policies to reach a precise labor market goals. Employment growth in the formal segment must exceed the labor force growth in the economy, and labor market regulations and institutions must not generate strong incentives for the substitution of capital for labor. In order to protect output per worker in non-formal segments from declining growth must keep on going. National policies in developed countries must focus structural unemployment issues in order to reintegrate the people who lost their industrial sector jobs. Policies that increase labor market flexibility will change the situation rather government must promote new forms of retraining and guarantee welfare through wage subsidies. New labor market policies are needed in Central and Eastern Europe, but to make them effective the growth in the service sector must provide new jobs.

2. THEORIES OF MIGRATION FOR ANALYSIS OF HIGHLY-SKILLED LABOR MIGRATION

A study and analysis of migration and its theories is very complex. Migration is a multidisciplinary phenomenon which can have both negative and/or positive impact on societies, economies, industries and people's lives. International migration is not a new phenomenon, nevertheless it's one of the most controversial issue for the past decade. National security, political, social, economic issues are among the areas impacted by and sensitive towards international migration. The outflow and inflow of migrants to a country needs a proper policy measures to make sure the human capital pool is in its optimal level. Managing the human capital effectively could lead an economy to be competitive in its region and internationally. Due to the lack of policy measures and high competition for talent, countries are facing brain drain. These issue requires a proper policy to be able to retrieve the benefit international mobility of the highly skilled offers.

2.1. Theories for the analysis of highly-skilled labor migration

To understand international migration one needs to analyze the evolution of migration theories and that most significant times of migration and the factors influencing them such as colonization, indentured labour migration from India, migration after WWII, and migration to the new world from Europe to North America. Migration factors are divided in to macro, micro and mezzo factors. Therefore, the levels of analysis of migration dynamics shifts from microlevel decision processes to forces operating on national or international levels.

2.1.1. Neoclassical Theory of Migration

The first and oldest migration theory was named as the neoclassic theory; which defines migration as a circumstance resulting from a wage gap between source and destination countries of the migrant.

One of the oldest migration theorist Ravenstein has concluded the phenomenon of migration by making observation of the United Kingdoms' statistics in the 1880's his finding was that people move by the push-pull principle. Either they run-from or run-to opportunities, he also identified that people migrate to the closest places than furthest in search of better opportunities and only if they are unable to find something better they migrate bigger distances, This pioneer of migration theory has also noticed that female workers tend to migrate internally than men whereas, their male counterparts tend to take the international migration decision more than female. The finding has also seen the tendency of migration destination decisions based on profession and availability of work to other parts of the Kingdome and beyond (Ravenstein, 1885).

This theory has accelerated because of the migration to the new world, it's believed that 48 million people migrated from Europe to America and previous colonies Australia and New Zealand, for a permanent

settlement between the years 1800 and 1930. The industrial revolution in America which resulted in availability of jobs (Kim, 2007), colonial ties, famine in Ireland in 1845-1847 and assistance provided by Australian government for immigrants were some of the push and pull factors for migration (Anitha, 2013). Highly skilled migrant care workers to UK and Norway (Christensen, 28 November 2016) domestic workers, semi-skilled or low-skilled workers to the middle-east , tech professionals becoming ‘globetrotters’ in order to improve their income and status (Iredale, 2001). This theory describes migrations root cause as, everything being equal, the geographic variations in labour-rich and capital-rich countries. The assumption of neoclassic migration theory is that people migrate for a purpose of maximization, therefore takes in to consideration the wage gap between migrant source and destination countries (de Haas, 2014b)(Galeano, 2011)(Bach, 2007). Some researchers believe that an increase in the number of highly skilled human capital decreases the wage premiums therefore the wage differentials encourages highly skilled migration internationally to countries which offers better incentives to the migrant. Ceteris paribus the migration of highly skilled increases to higher wage countries where there is higher population of diaspora from the same countries as a result of decreased migration cost (Beine et al., 2008b). The idea is that networks which are larger tend to be associated with lower costs of migration, due to ease of information access, migrant might find job before moving to the destination country through network etc. It’s also believed that migration is driven by expected future income rather than actual having in mind that there is high probability of employment. Nevertheless, de Haas argues that income gaps do not always prove the migration destination choices. It’s said that past historic ties like colonialism and common language affects migrants’ destination choices even if the analysis does not prove true in some countries cases (de Haas, 2014a).

Neoclassic model portrays migration as an outcome of the migrants will to maximize once incentive and wellbeing that can be true in micro level but fail to recognize forced migration, human trafficking, and migration due to natural catastrophes in country of origin. Neoclassical assumptions has the ability to clarify and explain the international movement of wealthy and highly-skilled persons from OECD and sub-Saharan countries (de Haas, 2014a). Researchers also agree on the fact that those who migrate long-distance internationally are the once whom are considered as rich in their country of origin it is ‘fact that globally migrants do not usually come from the poorest segments of society’ (Folkersma, 2010) “the poorest countries tend to have lower levels of emigration than middle-income and wealthier countries”(de Haas, 2014b). Even though the better-off and highly skilled leave their countries of origin some research suggest that poor economic situation alone is not the push factor for the highly skilled but also more factors as human rights violation, corruption, lack of freedom in the public sector can as well be the reason to leave (Horvat, 2004). Neoclassic theory of migration manifests in both macro and micro-levels. In macro-level neoclassic theory defines migration as an outcome of labour demand and supply

differences in different geographic area where people migrate from labor-surplus areas to , results in wage differences among countries, which latter serves as a push or pull factor. Whereas, in micro-level individual choices in order to maximize income, quality of life, self fulfilment.

Human Capital Theory

“Observed migration patterns tend to be therefore hump-shaped: migration rates accelerate with the growth of country’s wealth as more individuals or households are able to fund migration. Then, as the country continues to develop, the emigration rates diminish and the incentives to migrate change”(Kurekova, 2010)

This ideology has brought a modification to the neoclassic theory where it led to the birth of human capital theory in micro-level. The neoclassic theory focuses mainly on wage differentials where as in micro-level it acknowledges the existence of or the impact of individuals’ choice when making migration decision. Referring to Sjaadstad 1962 as the founder of human capital theory, Kurekova states that in micro-level the human capital theory takes under consideration the age, skills, gender, marital status, employment status, occupation and more of the individual when making migration decision unlike macro-level where wage differential is believed to be the major if not the only factor. The human capital theory also identifies that migration increases with development of a country (de Haas, 2014b) because more and more people afford to finance migration, Lithuania’s emigration rate can be a good example, and since the independence of the country more than twenty percent of 1990’s population has left the country, even though the country has shown a great progress socio-economically (OECD, 2016). In human capital theory heterogeneity of individuals is the most important factor, it shows that individuals with the same country of origin behave indifferently, the choose to leave or remain that particular country, may chose different destination etc. nevertheless, this theory identifies that migration decreases with age and increases with level of education (Kurekova, 2010). Education creates awareness of alternatives, that are beyond once reach, it changes peoples’ perception of a “good life” which at the end of the day might aspire them to migrate in search of a better life (de Haas, 2014a).

Nevertheless, migration trends to some destinations as the Middle East proves to be otherwise. The highest number of migrants to the Middle East from Asian and African nations are migrating as domestic workers. Unlike the idea of the human capital those migrants from poor countries tend to be less educated than those from high income countries (Kurekova, 2010). Even though human capital theory brings heterogeneity to this study, both neoclassic and human capital theory tend to ignore market imperfection, the impact of policies and politics in the earliest and being too optimistic in the later. The inability to acknowledge migration as not only a phenomenon driven by wage differentials and individual choice, but also an outcome of uncontrollable events (war, disasters etc.) made these theories static and inflexible. The nature of neoclassic theory has led to the birth of another theory.

The micro-level of neoclassic theory can be called human capital theory. According to human capital theory, people move in search of a life according to their knowledge and skill. Therefore, it is believed that migrants are of highly skilled because of the fact that it gives them higher employability chance.

2.1.2. New Economics Theory of Migration

The new economics theory of migration (NEM) has come to existence to challenge the previous theory. According to this theory migration decision is made by families or households rather than an individual. It also takes multiple factors into consideration unlike neoclassic theory where the goal of migration is concluded as income maximization. Just like neoclassic model this model was based on push-pull factor nevertheless, it was believed that migration is a decision made by families and communities to reduce risk and maximize the benefit for the entire family rather than an individual choice. It was sought of in the 1980's. As a result of new economics theory of migration the research of causes of migration has shifted from individual's decision and factors to families and households. Due to the lack of perfect financial market, insurance market, perfect labour market, the risk of losing family's income and stability is high, therefor the less better of will pool resources and send member of their family abroad in order to minimize the risk and maximize their household income securing stability through remittances (Taylor, 1999). De Haas elaborates that migration in case of new economics of labour migration is the key to overcome market constraint in case of markets which financial markets are reserved only the elites(De Haas, 2008)(Olejárová, 2007), therefor migration opens a door to a better life (Abreu, 2010). Some researchers also believe that new economics theory of labor migration come to challenge neoclassic approach (Kurekova, 2011).

This theory can be reflected in today's migration from the horn-of Africa to Middle-East, Asian countries labour migration to the Middle East, nevertheless this theory just like neoclassic theory, has flaws describing migration factor as only a rational decision made by families to maximize their income and wellbeing. According to Stark the founder of this theory migration decisions are not made not only based on income maximization for the family and house hold, but also migration decision was made by income comparison, comparing with the group one belongs to or wants to belong to (Bloom, 2011). New economic theory of labor migration is believed to be "an elaboration" of the neoclassical theory. It highlights the impact institutions and non-economic factors have in making migration decision, and brings mezzo-level indicators to the frame factors in analyzing family and household decision as the motivators of migration.

2.1.3. World Systems Theory of Migration

This theory focusses on forces which are occurring globally as drivers of migration those forces can be called globalization of culture, propagation of western culture through movies and music and so on makes the recipient of those influences to want to go to those countries due to the gap in quality of life. Policies related to attracting a particular group of immigrants, the labor market demand, economic development which increases the demand for labor can also be some of the factors pulling immigrants. The World System Theory of migration, unlike neoclassic and New System Theories which focus on individual's choice, push-pull factor. It has taken events happening in the world which can be disruptive under consideration. This theory has acknowledged that such occurrences as colonialism, capitalism, globalization and more to have had an influence on migration.

Man's attachment to a land has decreased with the increase in industrial and capitalist farming, the growth in manufacturing activities (industrialization) has encouraged internal and international migration in search of a better life and higher wage. The expansion of capitalism and multinationals has caused "disruptions and dislocations", world-system is a phrase used by a researcher Wallerstein, which means world-economy. According to Wallerstein world-system is a "*multicultural territorial division of labour, in which the production and exchange of basic goods and raw materials is necessary for the everyday life of its society*" (Rise & Wallerstein, 2001). According to Wallerstein there are two regions of the world, the core and periphery. The 'core' regions are advanced and developed countries whereas 'periphery' are those which are the weak and poor nations; and the rest fall in to a semi-peripheral states. In case of migration people tend to move from peripheral regions which are labour surplus focused on labour intensive production in the world system to the core which is capital-surplus, which in the world system is producing, production which is capital-intensive. Wallerstein elaborates that the core tend to accumulate capital through unfair exchange where the core dominates and exploit the weak and sending resources which are extracted for as cheap as possible to the core (Rodrik, 2014) (Kvedaraite, Baksys, Repeckiene, & Glinskiene, 2015)(Rise & Wallerstein, 2001) for more read (Wallerstein, 1990) and in case of illegal migration the demand for low wage cheap labour jobs can be exploitative as a matter of fact origin country cannot benefit from remittances because the migrant can be living on working poverty with high risk of losing one's job (de Haas, 2014a).

Unlike other theories where micro-issues are under consideration, world system considers only structural issues as main driver of migration (Abreu, 2010). The role 'global cities' play in world system theory is enormous. The demand for immigrants labour, as a pull factor to global cities is seen as the force of migration and the dynamics seen in Central and Eastern Europe after the regions have shifted their politics from communism to open market is seen as an example.

International migration is a complex subject with an interdependent factors, these factors may arise from one or both groups, 'sender and receiver' countries or 'origin and destination' countries. Factors as social and economic conditions, government regulation, communication (both infrastructure and technology), connection to other countries (transportations), societies attitude to migration, family pressure etc. are some of the interdependent factors in making migration decisions.

With globalization comes increased international trade and bilateral agreements. Economies no longer focus solely on internal markets rather, they expand export manufacturing and agriculture for the purpose of export. Due to price war between local and imported goods, moving manufacturing plants to less labor cost providing economies fueled up, that has brought structural unemployment and disruption of the labor market that led to internal and international migration. That is why movement of capital "capital mobility" and labor mobility are seen as the core interdependent factors in world system theory (de Haas 2008).

2.1.4. Dual Labor Market Theory of Migration

According to the dual labour market theory's Priore, 1979 migration is an outcome of a strong demand (pull factor) in the labor market for low pay jobs in destination countries. It is believed that the pull (employment) factor in the labor market due to the unattractiveness of secondary sector for natives motivates migrants to go to the destination countries to less paid sector. Migrants in this case do not see themselves as part of the society they reside in. Wage rises in the primary sector nevertheless, proportional increase of wage in secondary sector for natives can be too expensive, and due to availability of well-paid job in the primary sector and b wages reflect status and prestige, natives are not willing to work in the secondary sector. The conventional sources of labor, women and youth labour because women has become part of the regular labour force in developed countries because of high rate in education, and the number of youth is declining due to demographic changes. Because the natives shun from the lower secondary sector employment, there is a constant and increasing demand for cheap labour which usually is provided by immigrants (de Haas, 2011). This model well explained the post-war migration trends to Europe and United states and also the current tendency of Mexicans migrating to USA, Lithuanian working in farms in Spain and Norway, East Africans migrants to the Middle East and so on.

2.1.5. Network Theory of Migration

The network theory of migration is not "why" but "what", the center of attention for this theory is not what starts off migration in the initial stage, but rather what keeps migration going through space and time (Massey et al. 1993). Migrant networks, influence the migrant's decision when choosing one's

destination. The personal and professional relationship between migrant and non-migrant are the main focus of network theory. According to some researchers, the existence of diaspora networks influences the migration decision (Kurekova, 2011). Migration patterns are unevenly distributed throughout economies.

Migrant's networks are one of institutionalized networks i.e. the interpersonal ties that connect expatriates, non-migrants, and returned migrants in migrants sending and migrant receiving countries through kinship, professional networks, friendships, shared community of origin. Network theory is related to a theory "migration systems theory" found by Magobuje in 1970. This theory's main assumption is that, migration alters the social, cultural, economic, and institutional conditions at both the sending and receiving ends. Castle and Miller emphasized that pre-existing links between source and destination countries, such as trade relations, bilateral agreements, investment flows, diaspora networks, colonial ties and cultural ties could sustain migration.

Network theory pin points the importance of personal ties of migrants and the role it plays between them, whereas migration system theory focuses on the fact that migration restructure the entire digital or developmental context of the place where it takes place. Migrants change their home country in developmental context through remittances or knowledge spill-over, migrants can change the host countries by contributing to diversity, innovation and building bridges between their home and host countries (de Haas 2008).

The most important factors are not only networks but also a culture of migration, a perverse distribution of human capital and the stigmatization of jobs generally performed by migrants (Arango 1998; Massey 1999). Globalization has accelerated the network theory concepts to idea of transnational migration. With the increasing means of communication transnational social space is created. And that keeps migrants stay connected and participate in both home and host-countries social, political, cultural and economic environments, that create not only movement of people but also culture, ideologies and technological transfers and knowledge spill-overs (Faist 2000).

Transnational migration is when migrants affiliate themselves to more than one place. Migrants belong to more than one culture, experience, value, and attitudes. With active participation in their host and home countries, they can impact one and the other. Drawing a policy measure using this approach can be dynamic.

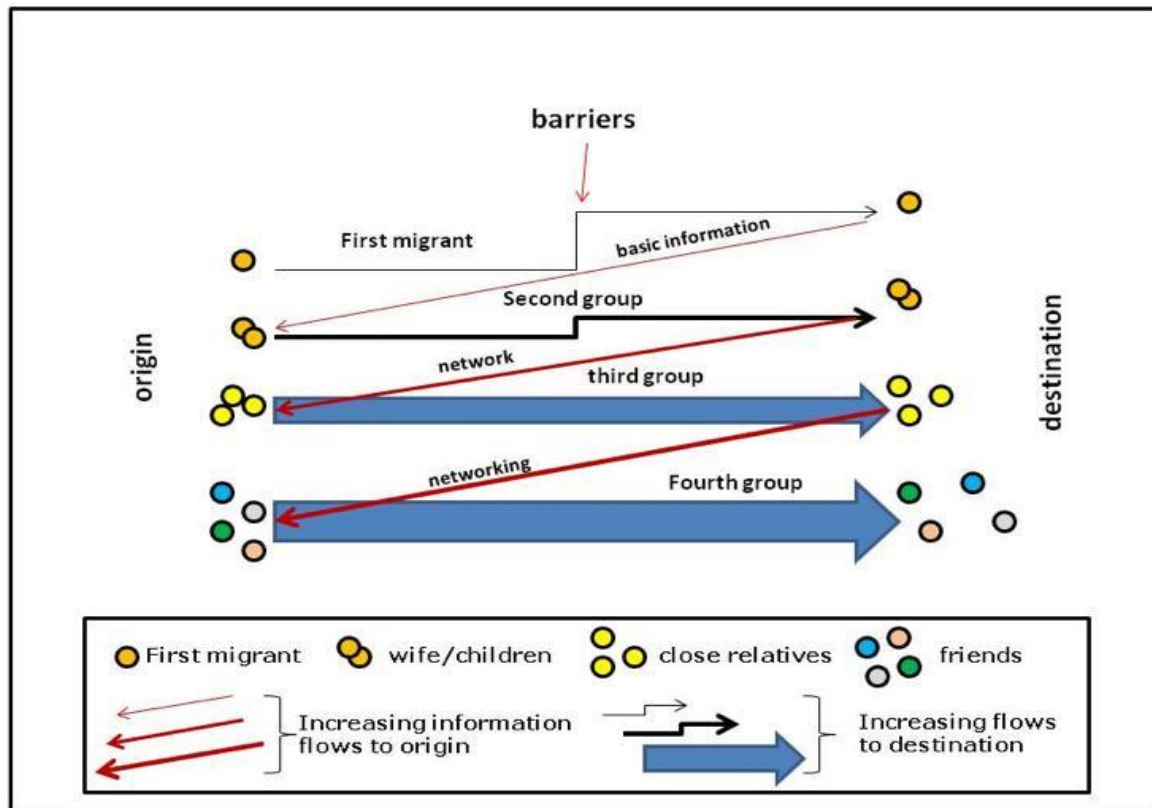


Figure 9 Chain migration and network development, Source: Adapted from Muñiz 2006

2.2. Societal knowledge management

The global war for talent is increasing. The shift from labor-intensive economies to capital-intensive knowledge based economy among developed countries has intensified the phenomenon. Globalization of knowledge economy has made countries globally to struggle in meeting the demand for highly skilled professionals. However the success of a country and its competitiveness will fall upon the ability of the government to “create, manage, and utilize” the knowledge needed to compete with a successful participation in the global economy. The future success of a country will be dependent on the quality and size of the human capital pool. Many countries globally fail to manage their knowledge effectively, that leads them to lost human capital, brain drain, lack of innovative man power and makes the economy to tremble. Many countries do not have societal knowledge management system.

	<i>SKM objectives with public governance focus</i>	<i>SKM objectives with industry and commerce focus</i>	<i>SKM objectives with private citizens focus</i>
<i>Overall SKM objectives</i>	<i>Improve society's internal functions, support of its citizens, and make the society globally competitive</i> Create understanding and capabilities to make balanced society feasible and successful Increase public servant proficiency and public service capabilities to provide efficient time- and cost-effective performance while strengthening quality and reliability Improve societal governance in support of balanced society	<i>Increase knowledge-related capabilities of industrial and commercial entities</i> Promote globally proficient and competitive industry and commerce to improve and maintain society's international competitive position Build long-term IC strengthen commerce and industry Foster R&D (Research and Development) to build a globally competitive inventory of products and services	<i>Make citizens more knowledgeable</i> Improve knowledge workers at all levels to increase local and global effectiveness of industry and commerce Facilitate better public sector interaction and support Build public knowledge-awareness and change knowledge-related cultural drivers

Figure 10 Examples of societal knowledge management (SKM) objectives, Source: Wiig 2006

Besides controlling the quality of schooling most countries fail in creating a talent bank. For instance Lithuanian statistical department do not keep a record of the education level of emigrants. In country level a well-managed knowledge management will meet the demand of the labor market with quality and efficient knowledge supply. The difference between the most competitive economies and the least complete, is the ability to put down the right policies, where both societies and businesses prosper.

“The purpose of societal KM is to build, safeguard, and utilize all important intellectual capital (IC) assets in every relevant area of society to support and advance societal intents and objectives. This includes personal knowledge and understanding, industrial and commercial structural IC assets, and public and national IC assets. Societal intents and objectives of highest priority are typically aimed to achieve durable long-term viability and success – and also by pursuing a balanced and stable society”(Wiig & Wiig, 2013).

Due to the demand for western education in developing economies, the internationalization of education has become an important focus for developed countries. By recognizing that “knowledge” is an asset with a high value, developed countries shift their focus to developing “knowledge and

training systems” as export revenue generators. Due to growth and development in emerging markets, knowledge has become the most important factor for employability. For example in 2015 Australia’s education service export has increased by 13percent to 20 billion dollars. Higher education in Malaysia is also increasing their international student’s enrolment by strengthening their relations with UK higher institutions (ICEF Monitor, 2017). After the 2016 election in the US, which led technology, innovation institutes and universities on strike due to unfavorable migration policy; and BREXIT, Australia is looking towards the sign in international student’s enrolment rate.

Because of the advantage in getting their qualificatoion recognized , highly skilled migrating to developed countries such as, Australia, Canada, the USA are often alumin of higher education institutions in these countries or in institutions of these countries operating offshore. Western degrees are the most highly recognized in developed countrries. Foreign education is also seen not only as a means for getting highend thechnical skills but also a foreign language proficiency and an increased intelegence on the host nation’s economic, political and social ecosystem. Specializations are being provided by private employers who have created their own internal systems such as Microsoft, SAP etc. and being accredited by providing on-the-job training and qualifications. In IT sector certification in specialization from private very large companies are considered as more valuable than university qualification because it’s believed that the person has more on the job training than those from ‘too academic and inflexible’ institutions. The harmonization of training is leading to internationalization of specialization through a standard training and evaluation system for professions (Iredale, 2001). Many countries do not have societal knowledge management system. Besides controlling the quality of schooling most countries fail in creating a talent bank. For instance Lithuanian statistical department do not keep a record of the education level of emigrants. In country level a well-managed knowledge management will meet the demand of the labor market with quality and efficient knowledge supply. The difference between the most competitive economies and the least completeive, is the ability to put down the right policies, where both societies and businesses prosper.

2.3. Human resources potential as an embedded element of country’s competitiveness

European countries compete for international labour force for different reasons. Population ageing in Austria, lack of skilled personnel in Belgium in national level, dramatic increase in employment demand in Ireland, high rate of emigration in Estonia, Latvia and Italy are among the strongest arguments for developing a way to attract highly skilled from other countries. Even though, Austria has given a priority to train and educate its citizens, that’s also true for major western European countries, in today’s global market one has to compete with other developed economies such as USA, Canada, Australia, Germany, Switzerland etc. for not only those talents from another part of the world but also its own national highly-skilled. Open border and lifted barriers on wok and living permits many people are becoming very

mobile, or has taken mobility as a way of life. The failure of any country would be not to prepare for it, and not to have the right strategy. The UK is attracting highly-skilled labour force from within the EU due to income gap and better standard of living and other third world countries. Special Visas, H-1B visa for USA, Blue Card for Germany and Express Entry system to Canada are to name the least. As global economies are shifting from traditional labour intensive economies to knowledge based, governments can have a negative or positive influence, to support enterprises attract talents by making incentives for foreign skills to come and remain in the country; and those ways are easing the process of getting work permit and labor immigration visas, providing tax incentives, improving the attitude of the citizens towards immigrants and promoting the country as an attractive place to work and live by balancing the push and pull factors.

Public sector driven model

Public sector organizations take the lead in promoting country employment opportunities, e.g. Work in Bavaria, Germany. The private sector can play the role in legitimizing these public sector efforts. For instance, large companies use the public sector recruitment platform to seek employees (instead of establishing its own recruitment channels).

The market and sponsor driven model

This is usually a public private partnership where the provision of services is carried out in cooperation with the business community, i.e. through sponsorship or service fees. The Brainport International Community serves as an example here, where the base funding for the service coordination is done by academia but 28 member companies are financing the service provision. In this model, the needs of the service users can be taken into account more.

The division of work model

Relies on the idea that private and public sector take distinctively different and complementary roles. In case of Singapore, the public sector has assumed the role of promoting the branding of the country through the 'Talent Capital' strategy while the private sector is responsible for the implementation of this strategy.

Social entrepreneurship model

Builds on the voluntary and needs based service provision which is functioning through the work of volunteers and social partnerships (e.g. funding from major beneficiaries such as universities or companies or fees). The Stockholm Global Expat Centre serves as an example here, i.e. a non-profit association founded by an expat who has set up a successful professional support program for arriving talents in cooperation with the major receiving organizations. Using the talents themselves guarantees high quality and targeted services.

The network model

This is an arrangement between different actors such as business and entrepreneurs, academia, public bodies and social entrepreneurs, etc. This is a participatory model

that is based on the idea that talents coming to a country can enter through different 'entry points' and hence do not need one single entering service. The different parties welcoming and supporting talents work in cooperation or under one platform, e.g. Copenhagen Talent Bride which offers a regional collaboration platform for employers as well as services to talents and their families.

The talent attraction arena centric model

These are mostly geographically concentrated innovative milieus or arenas that attract people sharing the same lifestyle or interest, e.g. science parks or clusters like EnergyVaasa.

The single forerunner approach

Is a model where the talent attraction management is initiated and carried about by a single person or company

Figure 11 Talent attraction and recruitment models, Source: Rozeik, 2014

2.4. Barriers and Drivers of Professionals' Mobility

The push and pull models is the method used to describe and explain international migration of highly skilled professionals. This factors can be categorized in two three groups: economic and demographic, political and social.

Push Factors	Pull Factors
Economic and Demographic Poverty, Unemployment, Low wages, High fertility rates, Lack of basic health and education	Economic and Demographic Prospects of higher wages, Potential for improved standard of living Personal or professional development
Political Conflict, insecurity, violence Poor governance, Corruption, Human rights abuses	Political Safety and security, Political freedom
Social and Cultural Discrimination based on ethnicity, gender, religion, and the like	Social and Cultural Family reunification, Ethnic (diaspora migration) homeland, Freedom from discrimination

Table 1 Table 1. The push pull explanation

The International Labour Organizations' (ILO) ISCO-08 defines skilled people the four categories managers, professionals, technicians and associate professionals, clerical support workers out of 10 categories, of which only the upper four can be regarded as skilled professionals. Whereas, Mahroum

identified five major groups of skilled professions (1) senior managers and executives, (2) engineers and technicians, (3) scientists, (4) entrepreneurs, and (5) students. He also argues that migration of highly skilled people not only differ across professions, but also the types of work done by the highly-skilled people. According to this groupings it's also possible to identify the barriers and motivators of each group's migration. Mahmoud states that the Push and pull factors for the migration of scientists, for instance, might vary for engineers and technicians. The motives for a scientist to relocate outside his/her own country might be personal aspirations and scientific curiosity, whereas for an engineer it might reflect only salary conditions or the labour market situation in other countries.(Mahroum, 2001) Nevertheless, governments influence the decision to stay move abroad by various policies. Because the movement of people is a phenomena which manifested itself in relation to the development of trade, globalization, lack of barriers in movement, and there is very little or no negative impact on the person who chose to leave the country of origin. The formation of European Union on the basis of four freedoms is one of the examples which had triggered mass migration of Eastern European countries. Free movement of labor, free movement of service and establishment, free movement of capital and free movement of good; with all this freedoms came the challenge for less developed economies of Eastern and Central Europe. And those labor supplying countries have no right to strict their citizens to go to wealthier, more developed and high-income countries. Nevertheless, there are indicators showing why immigrants chose one country or another as their destination, and why they remain or move to other countries. One of that Index is called Migrant Integration Policy Index (MIPEX). It is a unique measurement tool which measures policies to integrate migrants in Australia, Canada, Iceland, Japan, South Korea, New Zealand, Norway, Switzerland, Turkey, the USA and all EU Member States. 167 policy indicators have been developed to create a rich, multi-dimensional picture of migrants' opportunities to participate in society. The index is a useful tool to evaluate and compare what governments are doing to promote the integration of migrants (Migration Integration Policy Index , 2017). It is believed that governments can have a negative or positive influence, to support enterprises attract talents by making incentives for foreign skills to come and remain in the country; and those ways are easing the process of getting work permit and labor immigration visas, providing tax incentives, improving the attitude of the citizens towards immigrants and promoting the country as an attractive place to work and live. Nevertheless one needs to remember that for highly skilled migrants from different sector the push and pull factor can differ and each group must be treated differently than one-size-fits-all kind of policy. Competitiveness of a country is one of the most important factors in developing international business and also attracting investment (FDI). And one of the measurements for competitiveness is the quality and quantity of human capital an economy possesses. Without a doubt when it comes to migration or migrant friendly policies, there is always the idea which backfires whether

sovereignty, nationalism, protectionism, national security issues or the like, there will always be those who are for and against freedom of movement. According to GCI index the competitiveness of a country is measured using twelve pillars. According to the GCI report, competitiveness is defined as the set of institutions, policies, and factors that determine the level of productivity of a country. The level of productivity, in turn, sets the level of prosperity that can be reached by an economy. The productivity level also determines the rates of return obtained by investments in an economy, which in turn are the fundamental drivers of its growth rates. In other words, a more competitive economy is one that is likely to grow faster over time.

3. EMPIRICAL ANALYSIS OF THE FACTORS TO ATTRACT AND REATAIN HIGHLY SKILLED PROFESSIONALS

3.1. Lithuanian competitiveness, market system and labour market analysis

The European Union has declared to become a knowledge-based economy through innovation and high skill development; creating the right policy to attract and retain highly-skilled labour force is therefore key element to implement this strategy on national and regional level. The purpose of this research is to contribute to national initiatives to attract and retain highly skilled professionals. For the last 25 years the Lithuanian government has focused on either attracting direct FDI to the country and had a long and fruitless agenda on how to decrease emigration and bring back Lithuanian emigrants. Facing the demographic problem Lithuania has today, if the problem is not addressed, it will lead the country to a position where the highly-skilled human resource pool would be so low that Lithuania will be unable to achieve its 2030 strategic plan. Lithuania 2030 is a national strategy document which states and outlines Lithuania's vision of the future. The strategy encompasses three priority strategies 1) Smart Society which is defined as, a happy society, open to ideas of every citizen, ready for challenges and innovation, politically savvy; adhering to the values of self-governance and solidarity. 2) Smart Economy which is, flexible and competitive, it creates high added value rooted in knowledge, innovation and entrepreneurship. It adheres to the values of social responsibility and sustainable growth. 3) Smart Governance, open, inclusive and goal-oriented, Lithuanian governance culture meets the needs of the society by providing high quality, efficient and effective public services. (Lietuva 2030, 2016) The aim of this research is to contribute to existing policy by the migration flows management.

This empirical research encompass the following blocks:

- Analysis of statistics reflecting general trends of Labour market structure in Lithuania
- The case analysis of selected national policies, in order to identify the structure and major pillars of the policies on highly skilled human resources and talent attraction and retention.
- Empirical survey based on structured expert interview to explore the gaps and major challenges to be tackled by Lithuanian decision makers when working on such strategy;
- Survey of emigrants' opinion on the major drivers of migration, in order to get parallel insights how powerful are different motivators in emigrants' communities.

Demography and migration

Lithuania is the largest of the three Baltic States, situated in Northern Europe, Lithuania shares border with Latvia, Belarus, Poland, and Russia by land and Sweden by sea. After the independence from the Soviet Union in 1991, Lithuania has become not only member of the EU but also the NATO in the same year 2004. Lithuania has made a lot of progress in infrastructure development, the economy was also

resilient at the time many countries suffered from the crisis. Nevertheless Lithuania has become one of the fastest demographically declining emerging markets in Northern Europe. Since the Lithuanian independency from the Soviet Union, the rapid decline of population shows no sign of abating. The outward migration has continued increasing from early 90's to date, and 2010-2015 record high emigrants left the country. Facing the demographic problem Lithuania has today, if the problem is not addressed, it will lead the country to a position where the highly-skilled human resource pool would be so low that Lithuania will be unable to meet the labour markets demand.

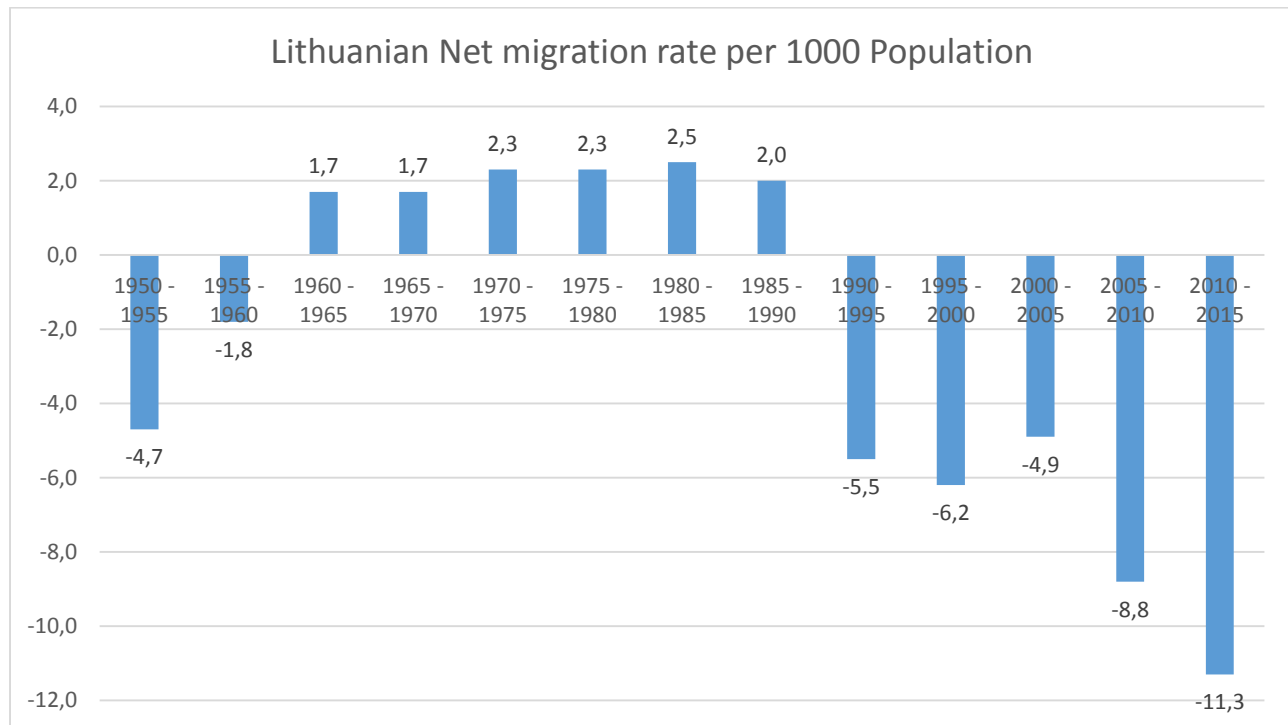


Figure 12 Lithuanian Net migration rate per 1000 Population, Source: United Nations Department of Economic and Social Affairs

Unemployment rate according to Lithuanian Labour Market (Lietuvos Darbo Birža), reaches 8, 5 and 7, 4 in 2015, and 2016 consecutively. Even though the number of job seekers was 19thousand in June 2016, and 33thousand job vacancies, one of the labor market challenge is to Match the skills available and demanded. Skill mismatch will continue to challenge the labour market, due to fast changing technology and structural unemployment created as a result.

The population of Lithuania has declined by more than a quarter of a million over nine year period. The segment which is older than 60 years old is higher than that of the segment up to 14 years old. Things do not seem to change in the short-run either, according to (OECD, 2013), Lithuanians emigration tendency is permanent or long-term emigration as many families with children are leaving the country, the fact that the attitude towards emigrants being positive and young people becoming more mobile and prone to migration fuels up the situation. Lithuania has almost lost 22% of 1990 population.

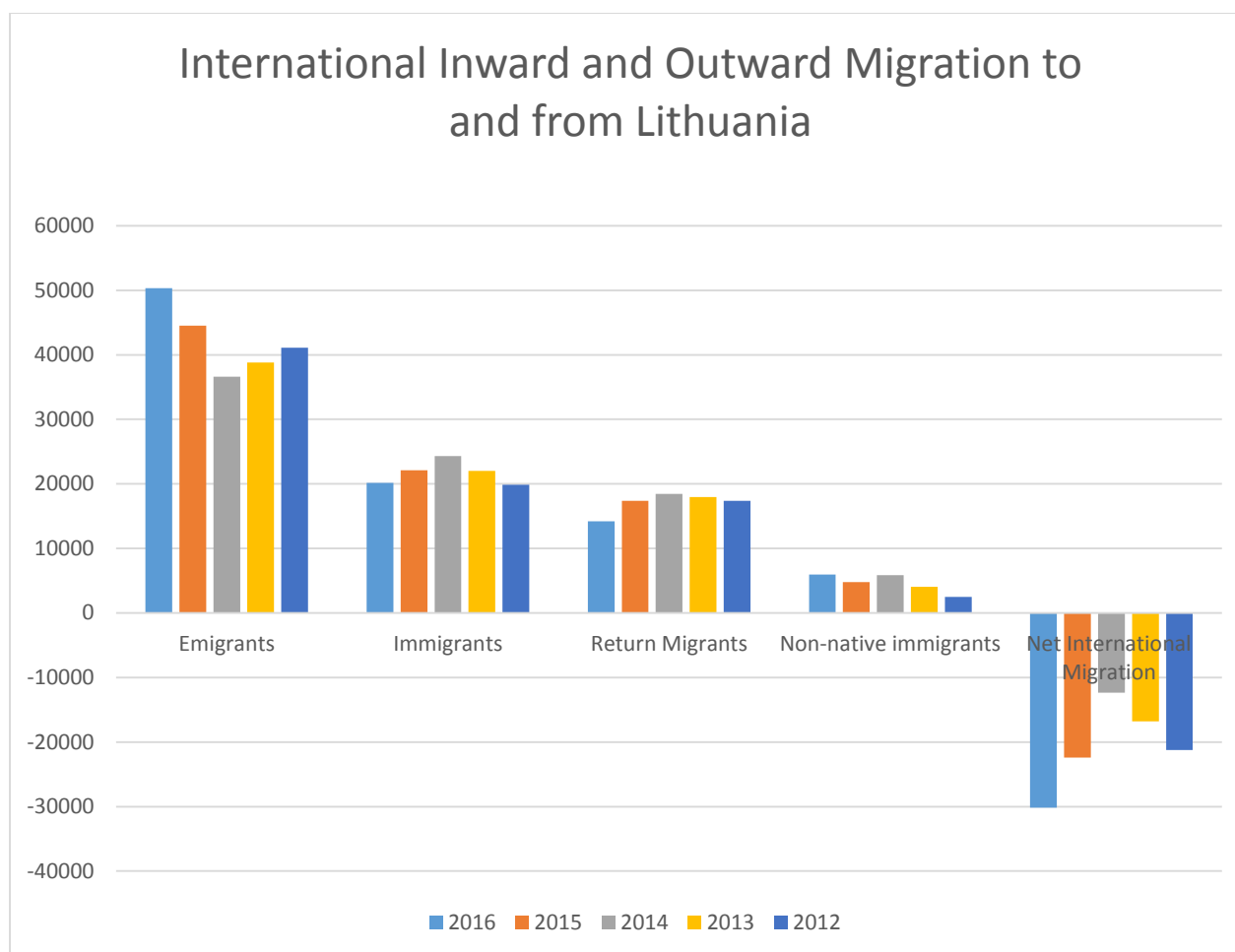


Figure 13 International Inward and Outward Migration to and from Lithuania, data source: Lithuanian statistical department, 2017

First the most urgent task is to decrease general outflow of migrants (retention), which is dramatically negatively changing human resource pool of Lithuania. It weakens the quality of pool and decrease the critical mass of HS performance. The highest emigration rate was recorded in 2016, more than 50 thousand people left Lithuania compared to 44, 5 and 36, 6 thousand the previous years. Lithuania has a negative net international migration by more than 100 thousand from year 2012-2016. United Nations 2015 population projection suggests that Lithuania will lose 15% its working population in the coming 15 years. Lithuania's working age population is projected to decline by 44% between 2013 and 2040, due to ageing, as well as ongoing emigration (European Bank For Reconstruction And Development, 2016).

Lithuania is facing a huge challenge due to high emigration rate for a couple of decades backed by low-birth rate creating a catastrophic momentum for the labour market. According to Lithuanian Banks' forecast for the year 2017, due to less and less young people joining the labour force each year and high number of emigrants the labour market will be in dire need of employees, where there will be job offer by enterprises and to fill the vacant space enterprises need to raise the salary they offer in order to attract

employee, the problem is the productivity of employees remain the same while the salary is increased which at last will hurt enterprises' competitiveness in the market.

To be able to create effective policy on highly skilled Lithuania has to cope with the challenge to change public opinion. Lithuania is not an exception with this task in European and global context. There is an ideological mismatch of expectations between business associations, politicians and the general public. European governments have to cope with general populist movement by some media agencies and political parties that "immigration is an evil" which one has to fight, worsens the situation even more. On the other hand, governments have to tackle the necessity to increase labour potential. E.g. New Social Market Economy initiative has started in 1990s in Germany where the government decided to create a policy which will help the country in attracting highly-skilled labour force, the idea was opposed by political parties and the 10 million Euros annual budget was set on lobbying decision-makers directly and to influence public opinion. This activity started to show results after a decade in 2000's where the government has launched a temporary labour recruitment of 20,000 highly-skilled migrants offering a Green Card initiative mainly for information technology specialists (Menz, 2016).

According to UNESCO in year 2014-2015 the number of Lithuanian students studying abroad was 11, 9 thousand, the top destination being the European Union. The United Kingdom, Denmark (1,950) tuition is free for all al students from the European Union, Poland (950), Germany (849) and the Netherlands (804). While top 5 origin of students were Belarus, India, The Russian Federation, Nigeria and Spain. 8% of total student population studies abroad.

Country of origin		Destination country	
Belarus	1,738	United Kingdom	4,867
India	234	Denmark	1,590
Russian Federation	229	Poland	950
Nigeria	219	Germany	849
Spain	182	Netherlands	804
Ukraine	164	Russian Federation	375
Azerbaijan	155	United States	297
Poland	120	France	260
United Kingdom	114	Sweden	210
Israel	110	Latvia	209
Sweden	107	Norway	187
Germany	88	Italy	182

Turkey	86	Belarus	129
United States	76	Spain	121
Lebanon	74	Finland	112
Italy	73	Switzerland	83
Latvia	69	Austria	82
Georgia	61	Ireland	76
Republic of Moldova	55	Belgium	56
Ireland	47	Ukraine	48

Table 2 Flow of Tertiary-Level Students to and from Lithuania, Source: UNESCO

An information published in Migrations department web site states that in April 2016 the number of foreign students with temporary resident permit was 1647 (Migration Department of Lithuania, 2017). Due to the declining number of student enrolment and negative international student's inflow, Lithuanian ministry of education is considering merging higher educations. There is a controversy regarding the quality of higher education and if it is even effective to do that. Nevertheless, the question remains, can merger bring betterment to higher education and the job market. Or can Lithuania invest in marketing knowledge export, attracting foreign students to fill the need of the labour market? The advantage is foreign students finance their high education to acquire the skills they need to integrate themselves to the job market and if Lithuania put in place friendly policies they could remain and be an input for the labor market.

Attraction and retention of highly skilled professionals: Case analysis

Creating a business friendly environment is one of the keys for development. The five major problems faced by business for doing business are listed as tax rates, restrictive labor regulation and inefficient government bureaucracy. International policy response is required for/in developing countries in order to address the imbalance in resource distribution, and that could improve employment situations in those economies. Developing countries must change the strategy of their growth and labor policies to reach a precise labor market goals. Employment growth in the formal segment must exceed the labor force growth in the economy, and labor market regulations and institutions must not generate strong incentives for the substitution of capital for labor. In order to protect output per worker in non-formal segments from declining growth must keep on going. National policies in developed countries must focus structural unemployment issues in order to reintegrate the people who lost their industrial sector jobs. Policies that increase labor market flexibility will change the situation rather government must promote new forms of

retraining and guarantee welfare through wage subsidies. New labor market policies are needed in Central and Eastern Europe, but to make them effective the growth in the service sector must provide new jobs. Emerging markets like Lithuania need to put the above policy actions in place too.

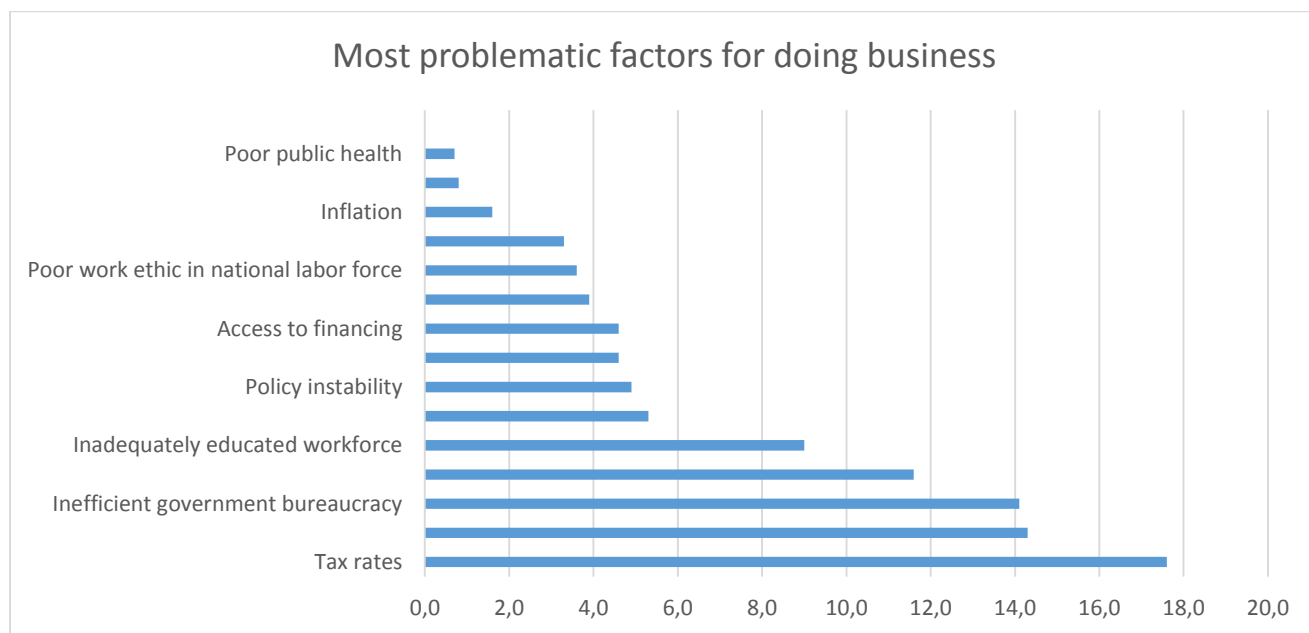


Figure 14 Most problematic factors for doing business in Lithuania Executives opinion at DAVOS, Source: World Economic Forum, 2017

This policy might expect some adjustments in the light of recent political crisis, but there is no sign, that is going to be cancelled. Lithuanian neighbor countries e.g. Estonia “the little Silicon Valley of Europe”, also has launched policies to attract highly skilled human resources to country most competitive economic sectors IT and Life sciences (EU Social Fund, 2016)(Rozeik, 2014) (Workin Estonia, 2017).

The rating of most attractive countries for skilled migrants is volatile, different policy responses and political ecosystem of countries affect where the highly skilled are heading or not. As the war for talent continues countries try to maneuver to be the “IQ magnet”.

The Canadian approach

In 2016 Canada has had a plan to bring in more than 300 thousand immigrants, part of which are highly skilled. Immigrants in Canada are highly educated, 50% of them hold University degree. The majority live in three big cities; Toronto (45, 7% of the population), Vancouver 39, 6% of the population) and Montreal (20, 3% of the population) are foreign-born. What attracts highly skilled to Canada? And how Canada makes selection of the best and brightest?

- For high-tech workers there is no requirement of certificate credential, employer does the checking directly, immigrants with a high-tech profession have high employment chances.
- Biotech sector most executives come from USA and high percentage of scientists from Asia and Europe. The main factor attracting them is not financial return rather the emergence of biotech clusters and the possibilities to get high level managerial positions.
- Tax incentives programs, development funds, and various grants offered start-ups (e.g. Gaming industry)

Reflecting Canadian immigration policy selection criteria, the vast majority of employed recent immigrants report working in English, French, or a mixture of official and third languages. Both temporary workers and graduates of Canadian universities are eligible to transition to permanent status through this program as long as they live outside of Quebec (due to the provisions of the Canada-Quebec Agreement) and work in a managerial, professional, or technical/skilled trade occupation. Those admitted through CEC (Canadian Experience Class) are thought to have fewer potential difficulties in the workforce than other economic-class migrants given their prior experience in the Canadian context.

Figure 15 The impact of previous experience in Canada for granting an employment visa

Attraction of Highly skilled labor immigrants (HSLM) to Canada

Canada has highly skilled migrant selection system which is called “Express Entry” provides a faster way for skilled workers to process their application and move to Canada. Express Entry steps:

A candidate can get additional points for: qualifying education in Canada, a valid job offer or, a nomination by a province or territory. If someone is invited to apply, they will have 90 days to submit an online application for permanent residence. Citizenship and Immigration Canada will process the majority of complete applications (meaning those with all the necessary supporting documents) in six months or less. Candidates can stay in the pool for up to 12 months. If they do not get an invitation to apply for permanent residence within 12 months of submitting an Express Entry profile, they may submit a new profile. If they still meet the criteria, they can re-enter the pool. This will prevent backlogs and ensure quick processing times.

Step 1) Potential candidates complete an online Express Entry profile

- Work Experience - 21points
- Language Ability (English/French) - 24points
- Education - 25points
- Age - 10points
- Arranged Employment - 10points
- Adaptability - 10points

Those who meet the criteria of one of the federal immigration programs listed above will be accepted into a pool of candidates

Step 2) the highest-ranking candidates in the pool will be invited to apply for permanent residence

Candidates will be ranked against others in the pool using a point-based system called the "Comprehensive Ranking System" which is composed of 1,200 points. It's extensive assessment of the previous application. This comprehensive assessment system has four blocks of measurement.

- 1) Core / human capital factors
- 2) Spouse or common-law partner factors

A. Core/human capital + B. Spouse or common-law partner factors = Maximum 500 points (with OR without a spouse or common-law partner)

3. Skill Transferability factors (Maximum 100 points)

A. Core/human capital + B. Spouse or common-law partner + C. Transferability factors = Maximum 600 points

4) Additional points (Maximum 600 points)

A. Core/human capital + B. Spouse or common-law partner factors + C. Transferability factors + D. Additional points = Grand total – Maximum 1,200 points

Candidates with the highest scores in the pool will be issued an invitation to apply for permanent resident permit.

Figure 16 Canadian selection procedure for Express Entry of HSPs

Canada has created Global Affairs office instead of ministry of foreign affairs. Today the office of Global affairs includes two more branches of diplomacy, International Development and International Trade offices as parts of Foreign Affairs. Economic diplomacy, building bilateral agreements is part of defending the country's interest overseas and increase Canada's impact.

“Skill-oriented policies such as R&D spending by the two countries offer a win-win situation as they contribute to professional and technical skill retention/attraction.”

Development of HRST in small firms

- Natural Science and Engineering Research Council of Canada (NSERC) provides about one-sixth of all funds for university research and development in natural science and engineering.
- Industrial Research Fellowships support PhD graduates in science and engineering while engaged in industrial research and development by covering a significant portion of their salary for up to two years.
- The presence of highly-qualified personnel is intended to develop long-term research capacity in Canadian companies, in particular SMEs.
- Collaborative Research Internship programs provide financial assistance to innovative Canadian SMEs for the hiring of post-secondary graduates to work on innovation projects in these firms. The program also seeks to provide career advancement opportunities for highly skilled young people.
- Youth Employment Strategy, this scheme provides financial support to hire post-secondary graduates to work in science and technology-related projects.
- Technology First Work is an Internet-based placement service, helping recently graduated technicians and technologists to start careers in small firms, where they are mentored by a certified engineering technologist.
- Skills for Business: a cost-sharing program that allows Masters and PhD students complete their studies while working for an SME on a technology transfer project

Figure 17 Canadian Retention Policy

The Canadian policy could be used as benchmark framework for analysis of the case of Lithuania. Lithuania doesn't have a governmental database for recruitment, if a foreigner wants to get a work permit before coming to Lithuania, S/he has to go through a process which involves the employer in which most of the time the employer do not want to go through the bureaucracy to bring a specialist.

Due to the limited number of Lithuanian embassies abroad, students face hard time to get the permit to come to Lithuania, and that can be said the same for skilled migrants too.

Lack of collaboration and the red tapes Universities face hardship to reach their potential clients, a lesson could be learned from the Canadian system where a visit to one website www.canada.ca gives the visitor, anything s/he wants to know about the country. From migration policies to a job search database.

- In the meanwhile the word “immigration” doesn’t exist in the Lithuanian Government Program 2016-2020/ Vyriausybės programa 2016-2020 (Seimas, 2016) re-emigration does (encourage re-emigration) and on attracting there is a vague message on who Lithuania is planning to attract, “attraction of emigrated talent” the “one million Lithuanians” or foreign professionals.
- “We will seek that the number of foreign students studying in Lithuania grows.” Nevertheless there is no mention of retention policy of international students.
- Even though many studies suggest that the future holds growth in urban population, the current government will be focusing on spending in smaller regions to make them livable in order to stop the process of becoming a “One City Economy”

3.2. Lithuanian competitiveness, market system and labour market analysis

Lithuania is 68th largest export economy in the world. Based on 2015 world economic data Lithuania ranks 35th /138 countries in global competitiveness index. This index measures 12 pillars of indicators.

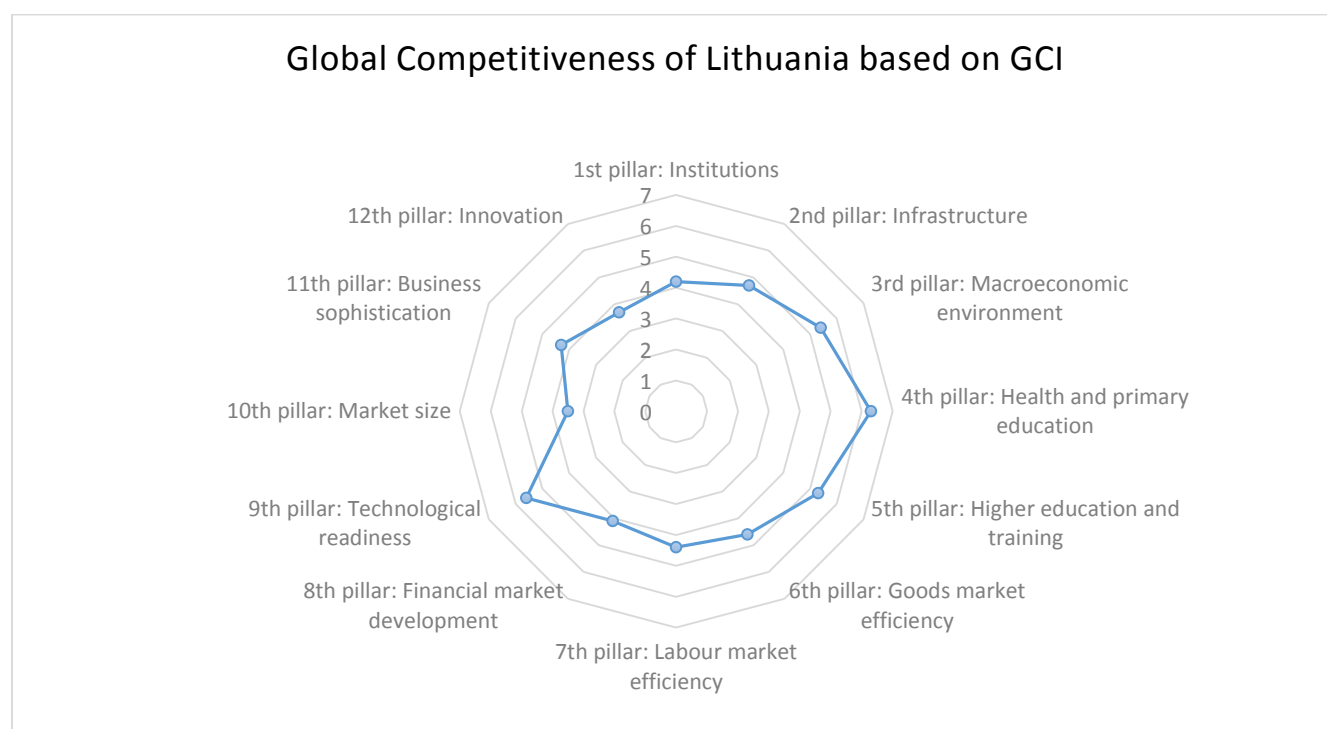


Figure 18 Global Competitiveness of Lithuania based on GCI, data source: World Economic Forum 2017

Lithuania’s capacity to attract and retain 1 means best and brightest normally leave to pursue opportunities in other countries and 7 there are a lot of opportunities in the country for talented people. Lithuania scored less than 3 points which makes it clear that the country struggles not only in attracting talents but also keeping the one at hand to remain in the country. Lithuania is ranks 106th out of 138 countries in retaining talent and 111th out of 138 countries in attracting talent. Lithuania need a well-engineered policy to improve the labour pool and labour market efficiency.

Labour market efficiency	Rank out of 138 countries			
	Lithuania	Canada	Germany	Rwanda
Labor Market Flexibility	56	14	17	24
Cooperation in labor-employer relations	96	20	25	18
Flexibility of wage determination	15	38	126	11
Hiring and firing practices	116	12	43	13
Efficient Use of Talent	34	7	14	8
Pay and productivity	46	13	10	45
Reliance on professional management	40	14	15	31
Country capacity to retain talent	106	16	17	20
Country capacity to attract talent	111	10	16	14

Table 3 Labor market efficiency comparison, data source: World Economic Forum 2017

The labor market indicators show that Lithuanian labour code makes hiring and firing procedures difficult for companies, compared to the other three countries businesses are relying less on professional management the GCI report also shows that Lithuania uses their talent less efficiently than Rwanda, Germany and Canada. Pay per productivity is also higher in the three analyzed countries than in Lithuania with Rwanda one point ahead of Lithuania. In Canada the pay per productivity is higher than in Germany.

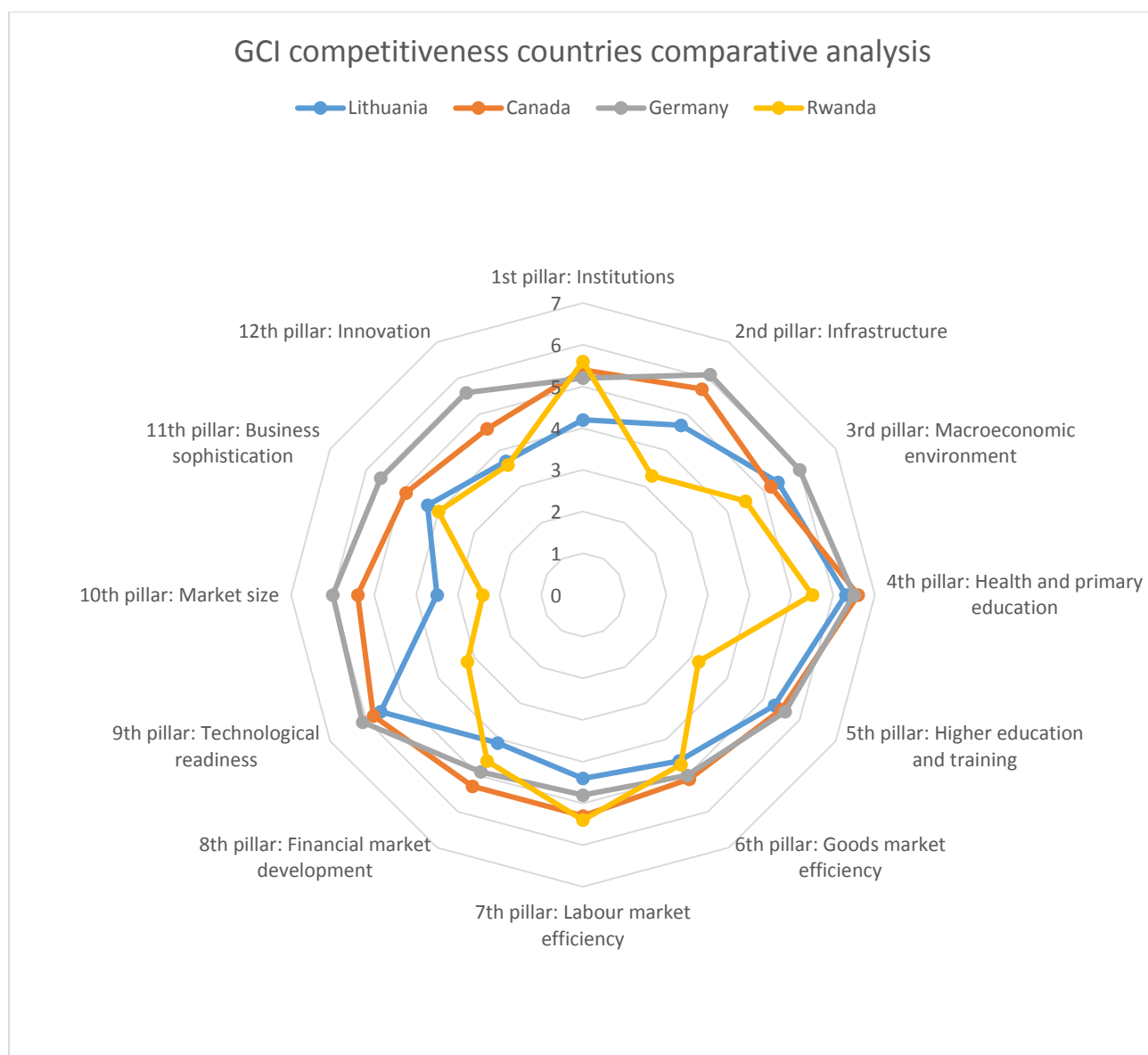


Figure 19 GCI competitiveness countries comparative analysis, data source World Economic Forum 2017

That the questions of the survey conducted on emigrants have been designed to prove if the barriers listed in MIPEX, and analyzed policies have an impact on emigrant's decision of migration. MIPEX migrant integration policy index rated Lithuania 34th out of 38 countries which includes all EU Member States, Australia, Canada, Iceland, Japan, South Korea, New Zealand, Norway, Switzerland, Turkey and the USA. The Migrant Integration Policy Index (MIPEX) analyzes the integration policy in eight policy areas, i.e. labour market mobility, family reunion, education, health, anti-discrimination, permanent residence, access to nationality and political participation; and hundred sixty seven policy indicators which help to integrate migrants to those 38 countries. It's a useful tool to analyze and understand where a country is with regard to other European member states and major highly-skilled professionals recipients.

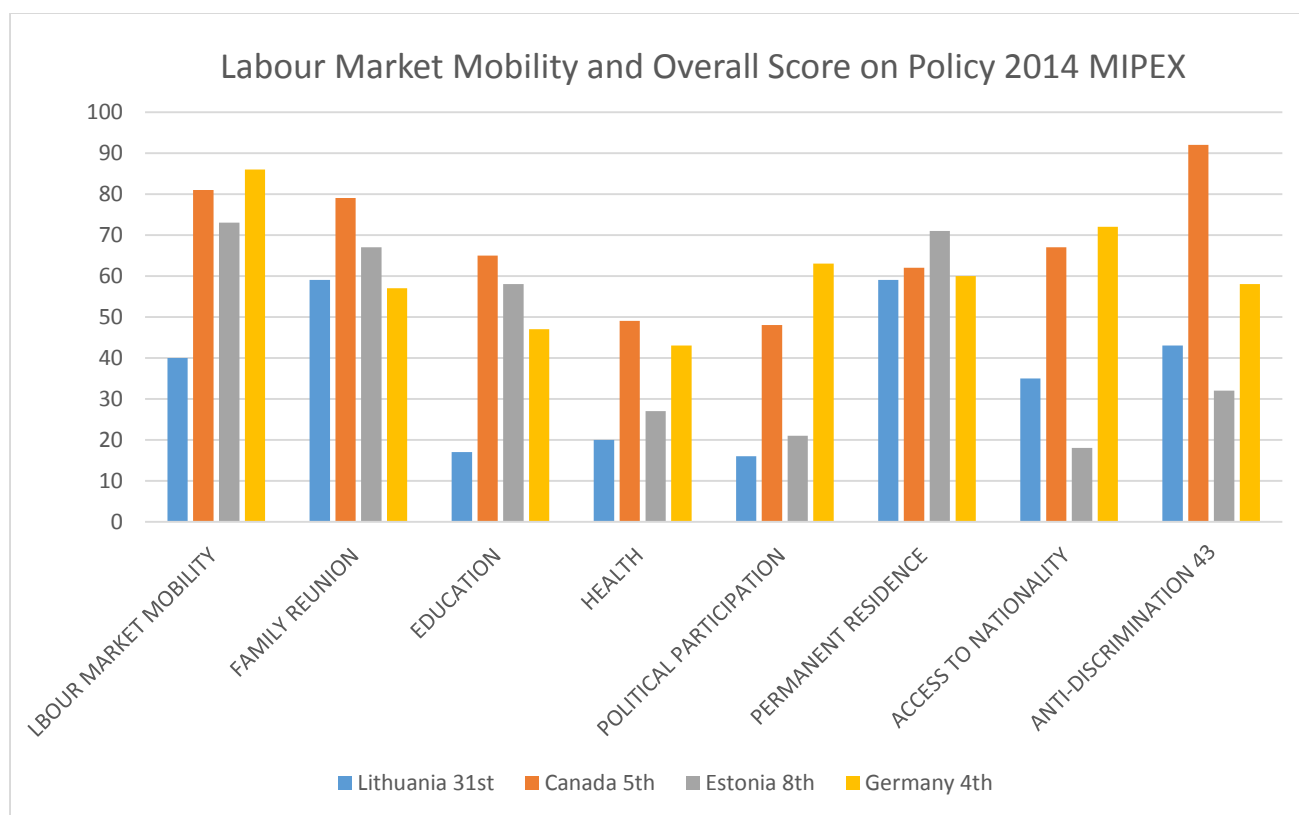


Figure 20 Labour Market Mobility and Overall Score on Policy, source: MIPEx, 2015

- 80-100 – Favorable
- 60-79 – Slightly favorable
- 41-59 – Halfway favorable Permanent Residence 59, Family reunion 59 and Anti-discrimination
- 21-40 – Slightly unfavorable labour Mobility 40 Access to nationality 35, and Health 26
- 1-20 – Unfavorable Education 17, Political Participation 16
- 0 – Critically unfavorable

Unfortunately, the result is not favorable neither for the country nor for the migrants. Highly-skilled migrants have many destination choices, from the most developed countries to developing which are competing in the global arena to attract and retain the best and brightest to and in the country. Lithuania has a long way to go with improving these major policies to make the country attractive to highly skilled professionals in addition to improving other factors such as economic factor.

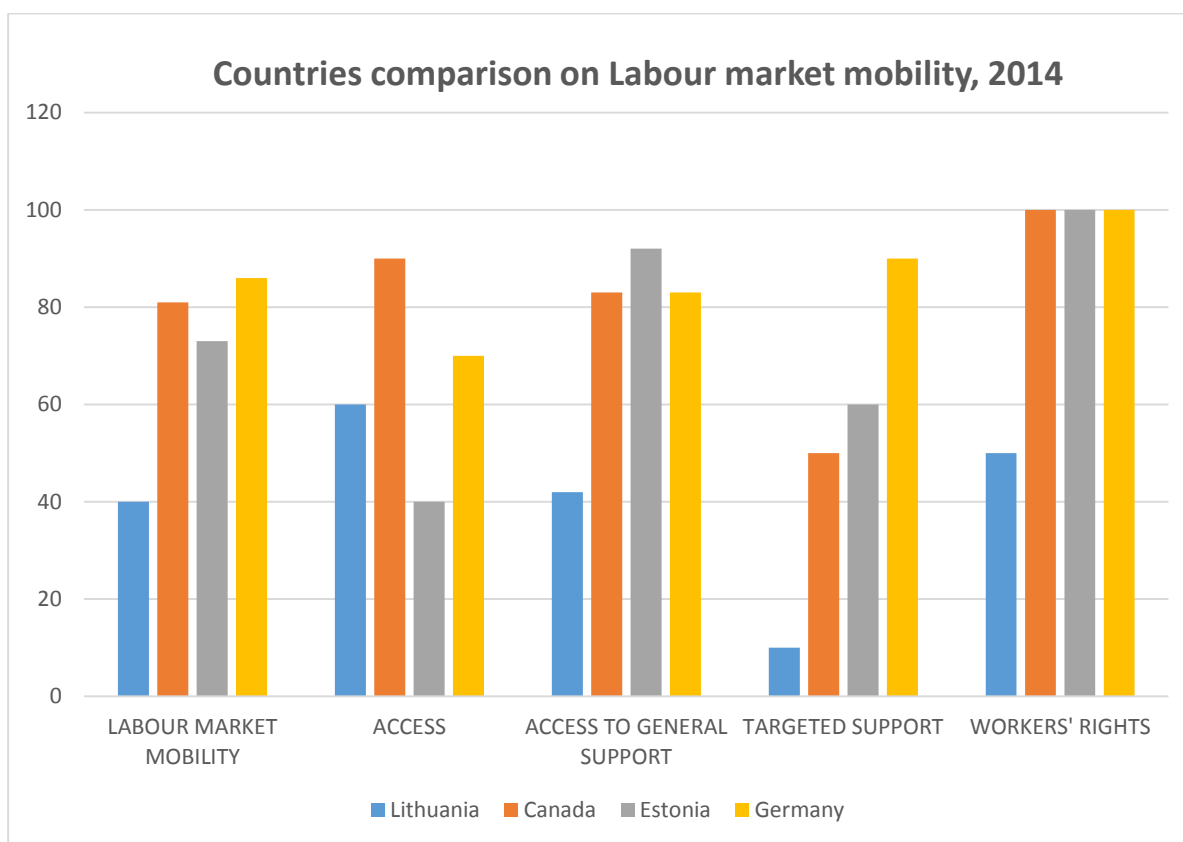


Figure 21 Labor market mobility Lithuania, Source: MIPEX 2015

According to MIPEX 2014 report, in Lithuania 50% of non-EU born female are likely to take low-paying positions where they are over-qualified for it whereas non-EU born university graduate immigrants are 12% less to find employment than Lithuanian-born university graduates. Lithuanian policies with regard to non-EU immigrants, mainly highly-skilled possessing university degree and temporary workers; makes the labour market unattractive by not providing the possibility to pursue the right quality job, education or training.

The sponsorship requirement from employers hiring a person with temporary resident permit only if the employer will not find a worker who is a permanent resident, EU citizen or a Lithuania citizen makes the process too long and inconvenient for employers therefor they tend to decline the application of a non-EU temporary permit holder, the other problem is that if an employee loses his job before five years prior to becoming a permanent resident, he/she is not entitled to access the labour market, making them to be locked into their jobs even in the situation where they are not satisfied to work for a particular employers, as a result, technically forced to leave Lithuania.

Estonia has set example for Baltic state by leading Lithuania by twelve countries and Latvia by fifteen. Estonia's labour market mobility score is 73/100 while Lithuania has 40/100 in Estonia, among all other

benefits non-EU citizens have access to state support to improve their skills and chances to find the right job, whereas they are not guaranteed the same general support in Lithuania. Another challenge for non-EU citizens is the complicated procedure for formal recognition of professional qualification while Estonia grants equal access to all residents with a foreign degree and skills.

Some countries offer individual orientations or advices for immigrants and most countries provide job-specific language trainings; targeted information on recognition of foreign degrees and skills. While migrant workers enjoy the same rights in Estonia they have only half their rights as workers in Lithuania, with greater rights in more than 24 countries out of the thirty eight. Non-EU migrant workers are also not entitled to public housings in Lithuania (MIPEx, 2015).

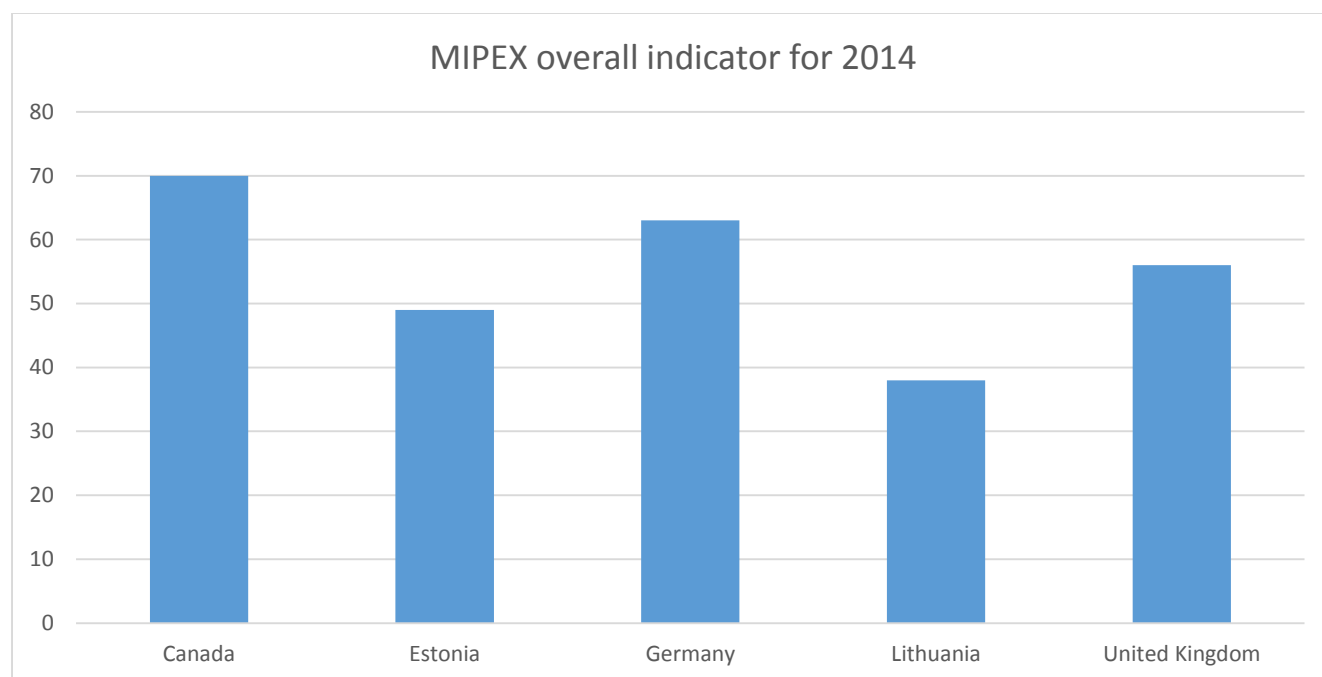


Figure 22 MIPEx overall indicator, source: MIPEx 2015

To connect the GCI indicators of country profile and MIPEx results with the findings reflecting major motivators for migrant individuals, an empirical survey has been done. The survey questions have been designed according the structure of motivators indicated in MIPEx.

The empirical survey conducted from September 12- October 03, 2016 through Linked, and 13% from Facebook it had 64 respondents of which 53.1% male and 46.9%female, living in USA, Germany, New Zealand, UK, Italy, Poland, Norway , 10.9% respondents currently live in Lithuania (foreigners, immigrated to Lithuania). 98.4% participants are between the ages of 21-59 years old, nevertheless the biggest number of participants 86% are between the ages of 21-39 years old. Majority of participants hold a graduate degree 46.9% followed by bachelor degree 42.2% making them fall in to highly skilled category according to International Standard Classification of Occupations ISCO-08 skill level four 3-6 years of education.

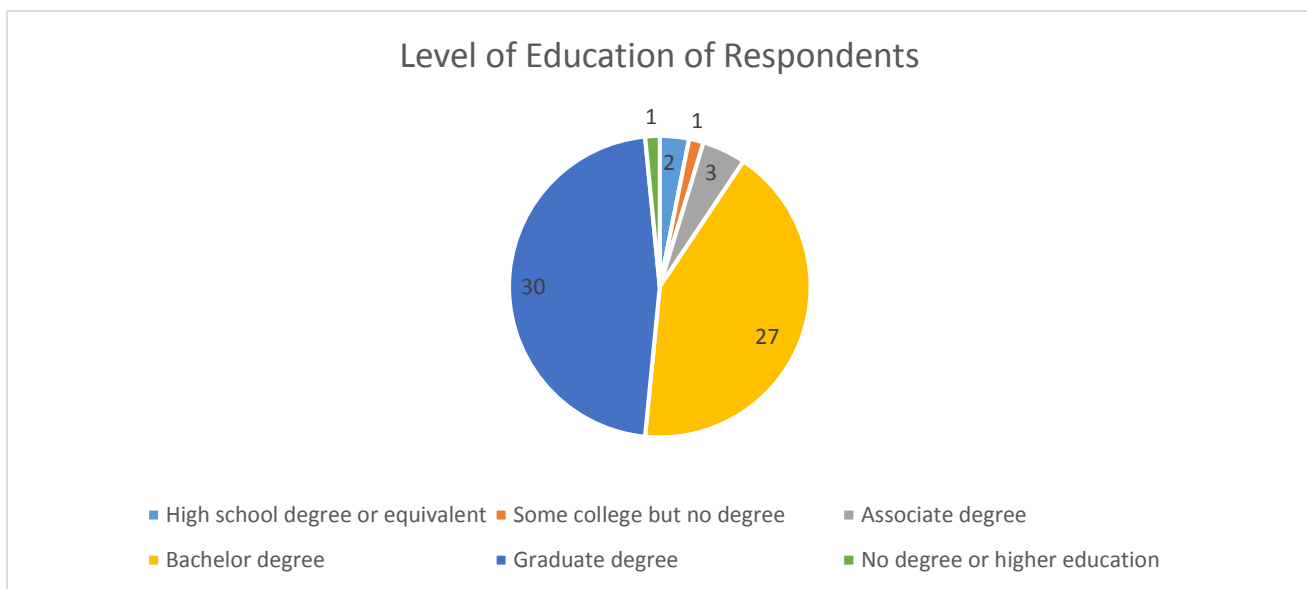


Figure 19. Level of Education of Respondents

In this survey, 90.6% of respondents are employed whereas only 3.1% are unemployed the others fall in to retired and or unemployed and not looking for a job. The majority of participants 42.2% work for international organization, 25% for local companies, 15.6% self-employed and 10.9% are civil servants working in governmental institutions.

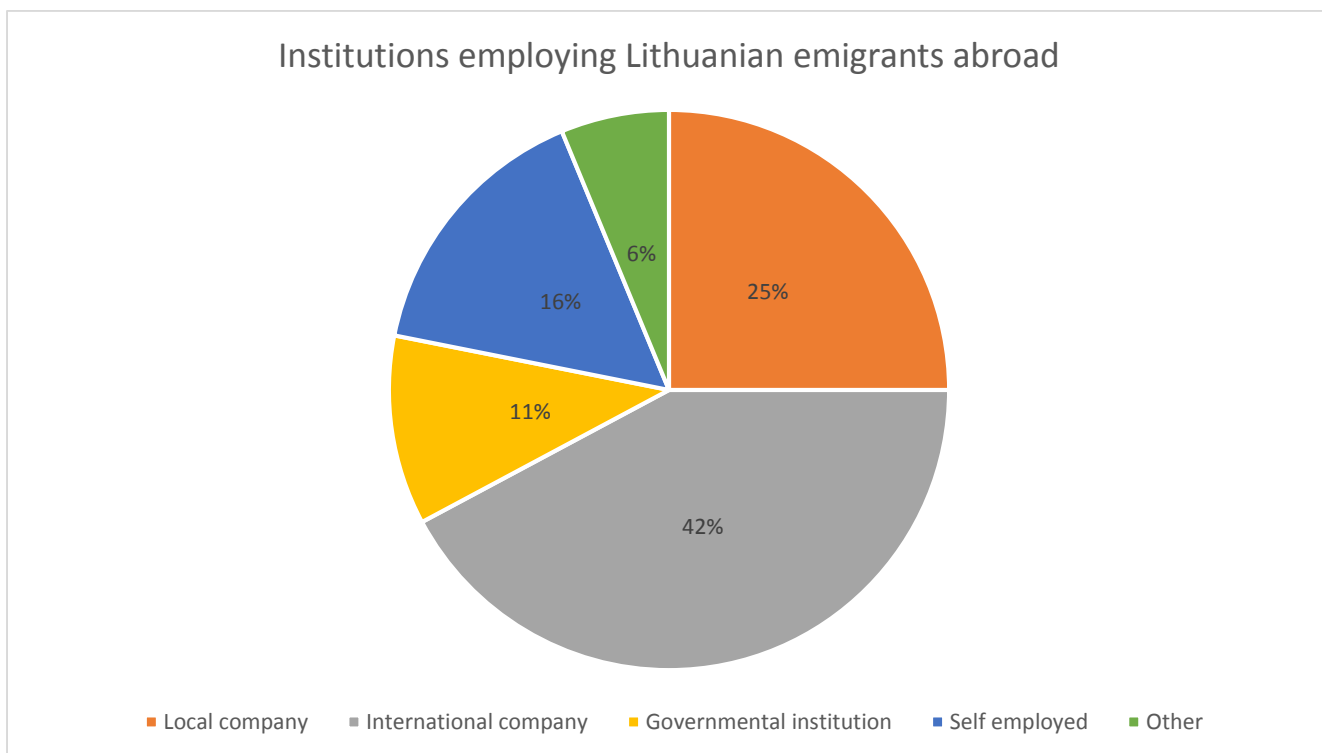


Figure 23 Institutions employing Lithuanian emigrants abroad

For the question given “What is the vital factor for choosing a company you work for?” respondents listed many reasons in which might not be applied to the whole society. The self-motivational factors included; salary, level of international operations, location, benefits, being independent, English language at work, flexible hours and possibility to work from home, opportunity to learn, get experience and career growth, possibility to work with a family member, prestige, interesting projects, possibility to work as a researcher in university, job safety, socially responsible enterprise, global reach, possibility to grow, stability of the company, work environment, diversity in the enterprise, job description, life-work balance, less bureaucracy, high added value products, technology, professional development, international experience, opportunity to learn from highly skilled professionals, corporate culture, strong brand, possibility to work with cutting-edge technologies, freedom, self-development, adequate salary, reasonable salary, job satisfaction. About one third of respondents listed salary as the vital factor in making decision about work place.

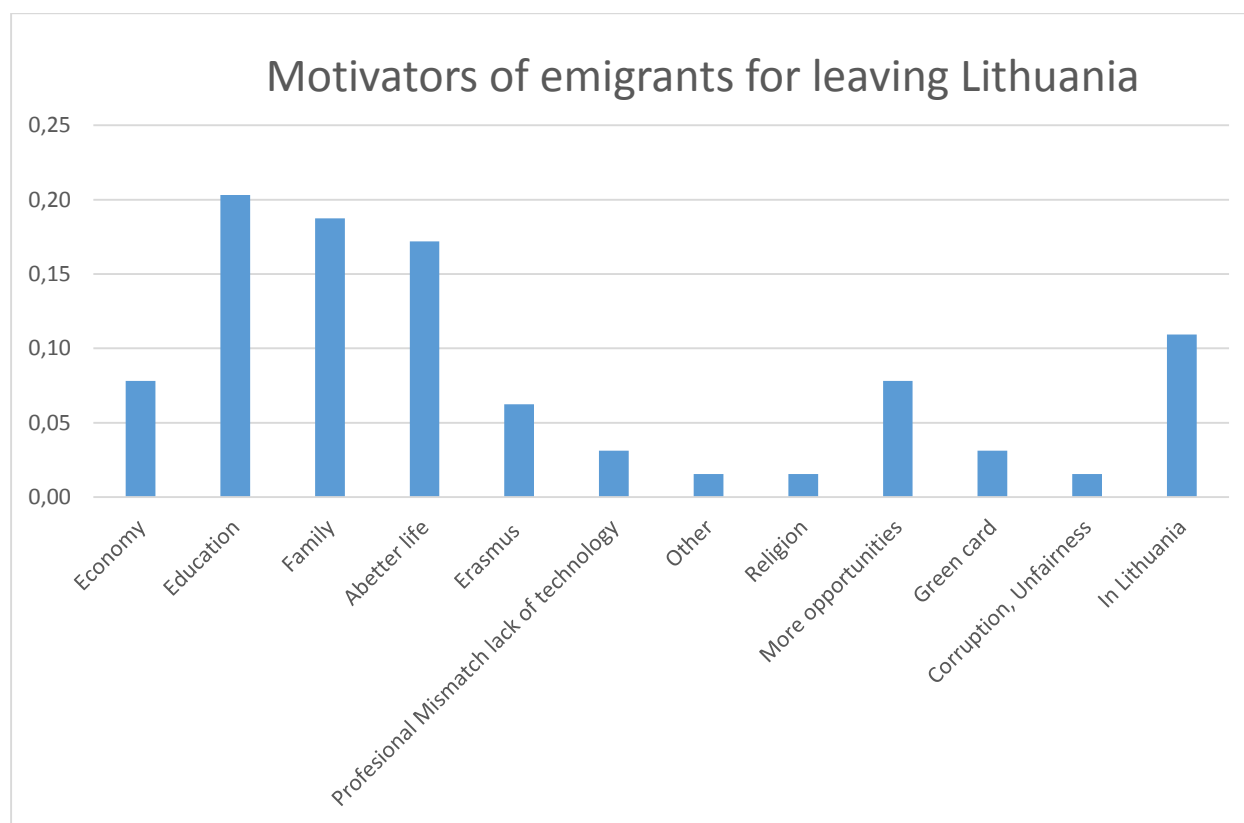


Figure 24 Figure 21. Motivators of emigrants for leaving Lithuania

The highest number of respondents 20.31% listed education as a main push factor. Family reasons is mentioned as second main reason for leaving Lithuania 18.75% it also included re-located as a long distance relationship was too hard to maintain; WWII, parents were on Soviet deportation list to the Siberian gulags, following a spouse who lives abroad, fall in love with foreigner, and my family moved

to USA are among the reasons listed as family. As the same time economy and in search of a better life are listed as a push factor by 25% of respondents. Professional Mismatch, lack of technology and better opportunities takes up to 11% of respondents' reason to leave Lithuania, 6.25% respondents left for their country of origin after being in Lithuania as Erasmus and or exchange students from other universities. The rest have expressed their reason for living their country of origin as after converting to Islam left in order to escape islamophobia, different scope at work and possibilities to improve work knowledge, "mass psychosis before credit crunch to borrow and splash the money on absurd mortgages" 30-39 years male migrant, Lack of education that in a particular study area and afterwards lack of demand for that professional.

"Salaries of employed jobs are at very low level compared with what a young person can earn abroad. This brings a person to a fairly complex dilemma – to live in home country or to have a good standard of living. I myself have a qualified job as a scientist in financial company. This kind of work is only done in headquarters of financial institutions thus there are really no jobs for my qualification in Lithuania. The only option for me to go back is to start my own company. I think it is fair that I am not willing to compromise on my career given up what I have achieved through hard work. Thus I am very interested in doing something I find truly exciting and motivating. Another issue that prevents me going back to Lithuania is poor choices of politicians regarding laws of employment as well as laws preventing dual-citizenship. Even though we are part of EU, other passports, such as UK have benefits if one wants to travel to US or Australia. This is why Lithuanian government should understand that climate of today is very much based on freedom, a practical choice. An individual will naturally make choices to be where these values are embraced leaving Lithuania in very poor place among possible choices for Lithuanian emigrant. In my opinion, Lithuania should put efforts to improving economic climate and laws that allow flexibility in peoples' choices in order to bring back talent to Lithuania. In contrast, I myself feel trapped by Lithuanian laws and seriously considering giving away my Lithuanian citizenship. And this does not mean that I do not feel patriotic about my country. I have a deep respect for people who fought for our independence and am fascinated by history of Lithuania and all brave people who fought for the future of our country. The fact that matters is current politicians are from last generation and are unable to adapt to rapidly changing environment. Young people need to be heard and have ability to make decisions for their future and do not respond well when older generation try to control them by diminishing their modern day values and accusing them with lack of patriotism – these are just desperate attempts to play on young peoples' conscience seeking for self-benefit. Yes, I think older generation are simply unwilling to pass the lead to young generation and young people who have successful lives abroad will not consider coming back until there is any hope to change the status quo." Dominykas, Quantitative Analyst, London

In support of the above letter from one of the participants for this research, asked about their opinion about migration the participants on the survey answered as follows, 31% of respondents think that it is an excellent opportunity, rated migration from being good to excellent. While 36% rate migration as good and 27% as very good. We can conclude that 94% respondents have a positive opinion about migration. Therefore, an effort to portray emigrants as less patriotic because they chose to live and work in other country will not bring a positive outcome. Rather it might discourage them from actively participating in the effort to better the country's future. Furthermore when asked "Where are you from?" even if they live abroad respondents answered to this question referring to their country of origin or home town i.e. Lithuania (17x); Chicago, Illinois; Lithuania but live in Australia, Vilnius (3x), Sarasota, Florida and Vilnius Lithuania, Skuodas, Kaunas Klaipeda; New Zealand, Auckland; Poland; I'm from Germany / Heidelberg; New Zealand; Germany; Born in Gaure, Taurages district. Currently residing in NYC, USA; UK (2x); Lithuania, Vilnius; I was born in Panevežys. Studied in Kaunas. Latest place of living in Lithuania was Vilnius; Vilnius, Lithuania (2x); Kaunas, Lithuania (2x); Lithuania, Utena but living in London, India ,Vilnius, Lithuania living in London, UK; Italy; Lithuania ; Siauliai city Born Jonava, Lithuania, studied in Vilnius; Vilnius, Lithuania. Currently living in Germany; London UK; Lithuania, Kaunas (3x); Kaunas, Lithuania Living in London, UK; Lithuania, Panevežys; Vilnius/Kaunas, Lithuania; Kaunas, Lietuva, Lithuania, Lithuania, Kaunas/Vilnius, Lithuania, Mažeikiai, Panevežys, Lithuania Palanga; Lithuania Vilnius, LT Norway. This answer also reflects not only that they still feel a deep connection to their country of origin but also internal migration has happened for some due to educational and other factors before the international migration decision was made.

The results of the survey conducted by the author is in line with the data provided by Vilmorus. A survey conducted by UAB Vimorus, in partnership with Lithuanian Ministry of Foreign Affairs regarding Lithuanian diaspora living in EU and other countries reflects similar outcome. 43% of the Lithuanians living abroad stated, information on the possibilities of returning to Lithuania isn't a burning issue to them. While 40% of the Lithuanians living abroad stated, that they are interested. To an open-ended question, what circumstances could encourage them to return to Lithuania, the respondents most often mentioned the following issues: 1) possibilities of work /good salary /career in Lithuania; 2) the economic/well-being growth in the country; 3) personal situation (family /parents etc. And To an open-ended question, what could motivate to become involved into Lithuania's life more actively and to maintain a Lithuanian identity, the respondents most often mentioned the double citizenship, more active Lithuanian Diaspora, and a stable economic situation (good living conditions) in Lithuania. Out of all respondents who took part in 2015, 149 hold a PhD, whereas 832 hold a higher education degree there for we can conclude that majority of respondents are highly educated. More than 1600 respondents were

born in Lithuania. The majority of expats 62% believe that their efforts in contribution to the welfare of Lithuania is not valued (Respublikos, 2015,2014,2013).

What could motivate to become involved into Lithuania's life more actively and to maintain the Lithuanian identity, almost a half of the respondents did not give an answer, while among the most popular responses were a more active Lithuanian Diaspora, more cultural events, maintaining Lithuanian traditions, a more favorable state policy/ bigger interest of Lithuanian politicians in emigration problems as well as the issue of double citizenship. As many as 3/4 of the Lithuanians abroad replied that they would agree to work in partnership with Lithuania's institutions striving to foster the Lithuanian identity among the Lithuanians abroad (Respublikos, 2015).

3.3. Lithuanian strategy for attracting and retaining highly skilled professionals

European countries compete for international labour force for different reasons. Population ageing in Austria, lack of skilled personnel in Belgium in national level, dramatic increase in employment demand in Ireland, high rate of emigration in Estonia, Latvia and Italy are among the strongest arguments for developing a way to attract highly skilled from other countries. Even though, Austria has given a priority to train and educate its citizens, that's also true for major western European countries, in today's global market one has to compete with other developed economies such as USA, Canada, Australia, Germany, Switzerland etc. for not only those talents from another part of the world but also its own national highly-skilled. Open border and lifted barriers on work and living permits many people are becoming very mobile, or has taken mobility as a way of life. The failure of any country would be not having the right strategy. The UK is attracting highly-skilled labour force from within the EU due to income gap and better standard of living and other third world countries. As every other EU member state Lithuania needs to develop the strategy for attracting and retaining highly-skilled labour because on high outflow of its citizens to wealthier and more developed nations; for better education, higher income, access to world class professional opportunities, freedom of expression, work-life balance, less corrupt system, more developed technologies and the like. In addition to that Lithuania needs to develop a strategy to improve the push factors and barriers in order to tackle both long-term challenges i.e. aging population, and low birth rate; and short-term challenge created by an abating decrease in human resources pool will have a devastating impact on the labour market.

Expert view based research on Lithuania's strategy for attraction and retention of highly skilled and the national policy improvement

This part of the research was conducted by interviewing eight experts from public, private and research institutes to get their feedback on the labor market situation and the challenge it is facing in relation to

highly skilled labour force. The interviews have been conducted in the period of five months, between December 2016 through May 2017. The interview has been constructed from there thirteen open questions, the interview was conducted in English by one interviewer. All responses have been recorded. Nevertheless, it was difficult to get a response from the agency (Invest in Lithuania) directly working with this issue under the ministry of economy, email did not get responded and call wouldn't make it beyond the reception.

The major research question was whether Lithuania has the right strategy or “a strategy” to tackle the challenges faced by the global war for talent and a downward shift of the demographics.

Experts

- 1) Rugilė Andziukevičiute-Buzė, Lithuanian Vice Minister of Economy
- 2) Sigitas Besagirskas Economist, President of Vilnius Industrial and Business association
- 3) Kastytis Gečas Founder of Lithuanian Innovation Center (LIC), Innovation Expert
- 4) Dr. Artūras Jakubavicius , Lithuanian Innovation Center (LIC), expert
- 5) Dr. Mantas Vilys, Director of Lithuanian Innovation Center (LIC), Lecturer
- 6) Dr. Ausra Maldiekiene Lithuanian Parliament Member, Economist, and a Lecturer
- 7) Artūras Zuok, politician, former city mayor of Vilnius, Business man
- 8) Kestutis Zaura, director of Lithuanian Labour Department at the Ministry of Social Security and Labour

The research findings are presented following//along the major questions answered by the experts and the statements they commented on.

1. Lithuanian higher education institutes (HEIs) do not fulfil the demand of the market for highly skilled labour

Lithuanian HEIs supply of graduates with regard to the labour market is believed to be not satisfactory by the experts who participated in this research for various reasons, the grants process for getting financing from ministry of education for the study areas listed as high-level professional is complicated. Hence the tuition fee is expensive and the study program to be difficult, most student apply for humanitarian studies. As a matter of fact imposing a limitation on the number of future STEM graduates in high-demand professions. And on the other hand even for those companies which are bringing highly skilled professionals from Germany where companies need to be supported by the reality is not as great as the promises are (Besigirskas). A substantial number of graduates are entering the labour market with low-demand professions like pedagogy, literature studies and art studies or no-demand professions as of Engineer of Ecology by Šauliu University where fifty graduates are joining the labour market which is not offering them anything for that profession, or they take on low-paying jobs and that makes the young

graduate frustrated and they chose to migrate to another country, we have a lot of social science graduates even with Master's Degree and even if there is a possibility to go to vocational training through the life-long learning program, people feel that it is shameful to go to vocational trainings and they prefer to migrate to England or Spain, work in cafes and farms earn a better living where no one knows their educational back ground in receiving countries and their jobs in their country of origin. "to work in LIC one need to have a knowledge and an understanding of; Business development, Enterprise development, Intellectual property management, Technology transfer, Public policy, Research development, Public finance policy, Finance support and so on" and that is far-fetched for students to get such a package from higher institutions (Gečas).

The labour market today is in need of generalists, people who possess skills and knowledges of more than one study area, but Lithuanian universities are preparing specialists, with a limited and narrow but deep understanding of a study area. And the depreciation of such knowledge is three years a specialist today is a zero after three years without an ongoing training and development, the education system is mostly pedagogical when it needs to be anagogical (Gečas). The experience of studying for a bachelor degree in Lithuanian university is a book based study where a student is just a listener. Teaching system needs a reform in HEIs students should have the possibility to be exposed to solving real life market problems case-based learning and get a possibility to learn on the job and that can be achieved through not on a paper co-operation and partnership but a real co-operation of enterprises and universities. The lack of real life work experience of lecturers is also another issue (Besigirskas) (Maldeikienė), Maldeikienė argues that higher education needs reform, and the society needs to change the attitude towards having a university degree just to have the certificate.

2. Lithuania has strategy for attracting and retaining highly skilled labour force?

Most experts' argue that Lithuania do not have a strategy to attract highly skilled people. "Lithuania has no strategy and enterprises we work for, approve that" says a former president of Lithuanian Industrial Confederation Sigitas Besigirskas (Besigirskas). Lithuania has no strategy for attracting and retaining highly-skilled and if there is any, it is only as a matter of fact, something politicians mention but not act upon. Lithuania is acting on ad-hoc principle there is no database for the human capital pool. The migration bodies and statistics department are not fixing what kind of people leave the country, there is no statistics or data on their destination countries and Lithuania doesn't have contact with ex-pats except those who belong to Lithuanian community abroad. The push and pull factors plenty, there is not much of a move by the government to stop emigration. "We will not stop emigration and we are not in a position to return back the lost human capital" (Jakubavičius).

Lithuania does not have a strategy for attracting or retaining highly-skilled for a very simple and at the same time complex reason, the country is not sure why people are leaving and the reason might become clear after 10-20 years (Gečas). While other experts evaluate this question as Lithuania has no strategy on average of 3/10 the Deputy Director of Labour Department at Ministry of Social Security and Labour (Zaura) ranks it as 7,5 and 6 of ten points the director of Lithuanian Innovation Center (Vilys) it also shows the opinion gap business enterprise representatives, economists and innovation experts with that of a public servant working closely with the labour market. Unless those different interest groups reach an agreement on where the country is and create a vision of where they would like to see the country change will not come. The current government does not have talent attraction and retention strategy, the government needs to do more in raising awareness of the necessity of immigration says Dr. Maldeikienė. The vice-minister also agrees that Lithuania does not have a strategy, nevertheless she says that steps are being taken to wards the betterment of the situation.

3. The quality of graduates satisfies the demand of the labor market.

According to the experts the quality of graduates can be rated as “good” average of eight points. They also argue that some study areas produce very high quality graduates where others perform less. One expert said that until educators get a competitive salary, it will be difficult to reach the maximum quality in education. The other issue pointed out was the enrollment to university, one researcher believes that only those who have the capability to study must be enrolled, and other would be better doing vocational learning.

Some companies look for specialists and other generalists. For example, the gap in Engineering and management or economics graduates is big (Besagirskas). Those studies where students are exposed to more practical study graduates are ready for the job market while graduates in social sciences are book smart the gap between what they learn at the university and the real life is like day and night. Most experts believe that although the quality of graduates fulfils the demand of the market, the market is not in position to retain them. Especially the best graduates tend to leave the country for a better economic and social system, “my best students are all over the world, working for international companies” said Maldeikienė.

4. Lithuania has a right strategy in attracting investment based on the ability of the labor market.

Experts do not believe that Lithuania has a strategy based on the ability of the labor market, it's evident that with unemployment rate of a little 8% enterprises lack highly-skilled labour to take the job positions.

Lithuania has still a long way to go to be able to attract FDI in diverse sectors. Because of the number of population it is important to develop business clusters to enhance their competitiveness. Lithuania needs a sectoral policy to focus on attracting FDI based on the labor markets ability. It's not a secret that firms are moving west to east in search of cheaper labor, enterprises are looking for a good logistic connection, availability of workers like tailors and a place for conducting the high value-added operation. Lithuania in this value chain could fall anywhere but it's still a very small market" (Gečas).

Lithuania is facing the same dilemma as other Baltic states and Poland where the government and other agencies are working hard to attract FDI, nevertheless the labour market is challenged with the unavailability of enough skilled people to take the positions, at this moment there is a demand for specialists includes sales managers, administrators, technical and commercial sales representatives, accountants, statistical and finance clerks, business service managers, stock clerks, engineers; tailors, cooks, drivers of various types, fishers, welders etc. currently there are more than 33 thousand job offers and only 19 thousand officially unemployed people. Even though unemployment is 8% according to the president office 13% of enterprises are in search of highly-skilled employees. One expert points out that there is "no strategy" for HSL. Hence the market offers very small incentive and Lithuania position itself as a country which provides skilled, cheap labour force, HSP will be less attracted to come or stay in this market.

5. Lithuania has a clear human capital strategy (to attract and retain HSL) in order to tackle short-term challenges due to the declining tendency of the human-capital pool

Almost all experts concur that Lithuania lacks a strategy both long-term and short-term strategy regarding HSPs. One expert believes that highly-skilled talents are looking for two things, high salary to live a good life or cutting-edge technology which is unavailable anywhere else and he said Eastern Europe in general does not offer that. Nevertheless, in Lithuania there are just a few sectors which can provide HSP this, for example, lasers, biotechnologies and engineering companies. A highly skilled professional and, of course, the HSPs prefer better conditions to work in other countries – Germany, Switzerland, USA (Besigirskas). One expert said that Lithuania in general does not have a strategy for HSL attraction or retention, in short-term it works on ad-hoc where in long-term there is no strategy. An expert who is representing governmental institution mentioned that in short-term steps has been taken to introduce start-up Visa, start up employee visa and the creation of a system to attract talent is being discussed. Furthermore Rugilė Andziukevičiūtė-Buzė said that according to the current activity of Ministry of Economy "we don't consider students as HS" (Andziukevičiūtė-Buzė). It is evident that the lack of attention from the government on the seriousness of the issues related to international migration in a big

scale, could lead to a serious socio-economic problem. Therefore retention must be given a high attention especially for those who would like to remain (international students who finish their studies in Lithuanian institutions).

6. Lithuania has a clear human capital strategy to reach long-term challenges due to the declining tendency of the human capital pool.

Human capital pool will continue to decrease with population size and market. As long as the society is confident that things are heading in the right direction, that they can be confident that they can realize themselves, it will be ineffective to create a policy for increasing birth rate and so on because it alone will not change the problem of the labour market and Lithuania does not have a clear strategy to tackle this issue. And regarding very highly-skilled professional Lithuanian labour market very small and the market is unable to provide them with any possibility to realize themselves. That's why they leave the country otherwise their skill and knowledge will be gone to the brain waste. Market size and company's stage of development is low. Lithuanian brands, private labels, world class private labels there are few which are international. Competitiveness is also low when it comes to other brands in the market, technologies which Lithuanian enterprises have is very low, except in some sectors such as laser technology, biotechnology, "maybe only 10 companies in other sectors – engineering, chemical sector are competitive enterprises" but the production scale is not big in comparison to other economies" (Besigirskas). In order to attract highly skilled labour there must be a demand for it, and Lithuania does not have enough pool of these attractive companies which requires highly skilled labour force. For companies to develop the world class products is not so easy and Lithuania is a growing economy, performed well after the crises had a higher GDP growth rate than most EU member states, but there is a lack of innovative companies low investment in R&D and "enterprises are still wary of forming or joining clusters" (Jakubavičius). Another challenge is – wages. Some companies make really big profit but they are not intending to pay higher salary than what's in the market. Therefore even when enterprises have the resources to keep the best-and brightest they still let them leave in search of a better pay in other places or abroad. Such phenomenon can create a decrease in innovation in motivation to work and remain in the same company decreases loyalty, makes employee feel that the success of an enterprise is not their success as long as there is no reward for a good outcome. Although, the salary situation is improving and because of the lack of skilled-worker, employers are forced to pay higher salaries, the wage level is not competitive enough to attract HSPs from developed economies such as western EU countries.

7. Lithuania's strategy for attracting and retaining highly skilled labor force is competitive in comparison to other EU member states.

Attracting FDI is not the only important thing to do, you need to have the right amount of skilled-professionals for every incoming enterprise. Our universities are producing specialists like of Engineer of Ecology in Saulius university where fifty graduates are joining the labour market which is not offering them anything for that profession, or they take on low-paying jobs and that makes the young graduate frustrated and they chose to migrate to another country, we have a lot of social science graduates even with Master's Degree and even if there is a possibility to go to vocational training through the life-long learning program, people feel that it is shameful to go to vocational trainings and they prefer to migrate to England or Spain, work in cafes and farms earn a better living where no one knows their educational back ground in receiving countries and their jobs in their country of origin (Besagirskas).

8. Name the top three most important economic sectors of Lithuania which suffer from the highest demand of HSP (Highly skilled professionals).

Besigiriskas, IT, Engineering, Chemical sector and in each sector enterprises face difficulty finding a specific specialist. An example he has given an example of a demand for Production Manager in textile industry and lack of tailors. Information Technology, biotechnology, engineering (Zuokas), ICT and engineering (Vylis). One expert has mentioned that in her opinion laser technology, biotech and so on have enough specialist and they are also preparing their own specialist, "it will be hard to speak about sector when the market itself is so small, but the ICT sector always seem to have high demand" (Maldeikienė).

9. Name the top three economic sectors of Lithuania where you would recommend to focus if creating a new sectorial policies//strategy to attract HSP?

The sizes of Lithuania's business sector made some experts to hesitate if Lithuania needs sectoral policies at all regarding HSL. Some experts believe that even though Lithuania is too small to focus on making product from A_Z they believe that Lithuania needs to focus on high-value-added production in the value chain such as producing hi-tech spare parts or components for tech companies. Hence, Lithuania is a bridge between the East and the west to strengthen the policies on the sectors which capitalize on Lithuania's geographic advantage is important. Logistics sector, information technology, biotech, engineering and creative industries (gaming, film making etc.) are the experts suggestion for focus. There is a difference in opinion, where some of them agree that Lithuania needs to focus on knowledge based high value adding sectors, other insist on not forgetting conventional manufacturing with a bit of a twist.

The example of Germany's manufacturing mentioned by Artūras as an important way of keeping more people employed and regulating the job market not only for highly skilled but also for less skilled.

10. Name the top three economic sectors of Lithuania where the major barrier for FDI is lack of qualified professionals/ HR?

All experts agree that ICT and engineering is the sector which lacks specialists the most.

11. What are the main motivators' (factors) of the highly skilled labour force attraction and retention to any country?

Mainly economic motivators, access to the global market possibilities to work for international companies, good salaries, possibilities for career advancement, good quality of life, remuneration, social policies, "inclusive market", salary, demand in the labour market, "ecosystem"(standard of living, connection with other big cities in Europe, infrastructure, clusters) are listed as pull-factors by the experts.

12. What are the main barriers of the highly skilled labour force attraction and retention to any country?

Bureaucracy, low wages, poor quality life, limited possibility for career advancement, corruption, lack of inclusive labour market policy, instable social system, difficulty to move to the host country, geographical element, remoteness psychic distance between host and home country, tax system, Low salaries, limited possibilities for career advancement, poor quality of life, "social exclusion" are the barriers mentioned by the experts.

13. a) What has to be changed in Lithuanian policy towards attracting and retaining HSP?

According to the experts Lithuania and many other countries are good at policy making and strategy creation the biggest challenge is implementation. "The laws have to be amended to liberalize the issuance of long-term work visas. Foreign students should be afforded the opportunity to get work visas. The government should be active in its efforts in inviting highly skilled professionals to Lithuania and creating the conditions for them to get work visas, assist with finding housing, provide space in nursery schools, etc. Also, the government needs to help with the integration of foreign highly skilled professionals into the community, especially in areas outside of the urban environment of Vilnius. There needs to be general economic growth in Lithuania, salaries need to become higher, conditions for work improved and more openness exhibited" (Zuokas).

b) The nearest future to assure competitiveness of the national economy?

“When could the Lithuanian economy become one of the top competitive countries in the EU or in the world or is that even possible? I believe that anything is possible. Everything will depend on the political will of the government and the actual steps it will take to improve the economy, otherwise the growth of the economy will stop. We need to have a large pool of highly skilled professionals within the next two years in order to stay competitive and to improve” (Zuokas). Nevertheless, one expert emphasized that “if Lithuania will not manage to change the migration problem in the coming two years, when the baby boomers leave the labour market to pension, that’s when it will hit the economy badly” (Maldeikienė). Lithuania just like other countries is good at drawing policy nevertheless, effort has to be made to implement it. Hence a policy on paper only will not bring any change. “We need a different social policy, we have 200 people leaving the country every day and neither the government and nor the society is not on its feet trying to come up with a solution” (Maldeikienė).

Lithuania needs visionaries to build strategies and policies, and cooperation of institutions to implement them. Generations, values, attitudes and the essence of country, nationality or boarder is changing. The generation gap is huge. Strategies are built by predictions by signs of what might happen in the future and how are we going to face the current and future unknown issues. Therefore, flexibility is needed based on the changes of the environment and technology.

4. SUGGESTIONS FOR DEVELOPMENT OF NATIONAL STRATEGY FOR ATTRACTING AND RETAINING HIGHLY SKILLED PROFESSIONALS

The suggestions which are elaborated on the basis of theoretical and empirical findings of this research are potential elements to be included into Lithuanian policy for attracting and retaining highly skilled professionals in the country. The suggestions are divided into the following parts:

- National strategy development
- International economic diplomacy
- Economic motivators
- Legal status of foreigners

Developing strategy on attracting and retaining highly skilled professionals is needed to cover existing lack of coordination and consistency among the initiatives of different policy making bodies (Ministry of Foreign affairs, Ministry of Social security and labour, Ministry of Interior, Ministry of Economy) and other stakeholders (Invest Lithuania, Enterprise Lithuania, Investors forum etc.) towards migration issue. The strategy has to:

Indicate the coordinated contribution of different players and stakeholders, the timeline of the whole agenda, KPIs and ensure the implementation of it.

- Facilitate a partnership between higher education institutes, governmental institutes, industry associations, enterprises and unions to address labour market situation and technical skills needed in different sector in order to identify the priority areas of economy, which have to become special areas of attention with special conditions to attract highly skilled professional from abroad.
- Develop a short-term strategy to bridge the gap of emigration of highly-skilled in pilot sectors of economy (where the demand is especially high) to create good practices and success story for further multiplication to the other sectors (e.g. Estonian strategy to boost IT sector).
- Establish National Human Resources Board under the Ministry of Social security and labour which shall be continuously working on analyzing the market condition, on demand of the labour market, co-ordinate and facilitate vocational trainings and re-trainings of those losing their job due to structural unemployment, also a body which closely works with the sectoral Human Resources Councils.
- Develop a sectoral Human Resources Councils which will be working directly with the stakeholders to coordinate the strategy with sectorial plans and needs.
- Make the sectoral design of a skill and knowledge requirements to employ high-demand talents from non-EU countries.

- Launch the national platform of free consultations and services (including legal immigration services, labour permissions, family transfers, starting business etc.) available to individuals willing to repatriate or immigrate for work in the country.
- Attracting high-value adding operations might follow R&D including advanced manufacturing and technical assistance.
- Carve a short-term and long-term strategy on how to fulfil the demand of R&D focused FDI especially in high growth areas as Information technologies, Nanotechnology, Life sciences, Biotechnology to create corresponding international collaborations with national support (it might be followed by the areas of the Smart specialization of Lithuania).
- Increase funding and incentives for R&D-based business and research organizations to create foreign researchers and R&D professionals pool, which could serve become central to attract highly skilled professionals to country.
- Coordinate co-operation between higher education institutes, governmental institutes, industry associations, enterprises and unions to create synergy to pull resources in order to enhance R&D based and High value added business activities, to change the balance of high and low value added activities in service and manufacturing sectors to position Lithuania internationally as country of advanced economy and high quality of life.
- Create sustainable national funding scheme to attract research and development centers and centers for research excellence (organization level) as well as attracting foreign researchers (individual level) from abroad. A special incentive package is necessary for family members of mobile researchers.
- Make life-long learning accessible for all Lithuanian residents and returnees, who want to improve their skills and knowledge or change professions to more demanded ones.
- Enhancing national potential of highly skilled people by making funds available for those high value-adding high-demanded professions in STEAM (Science, Technology, Engineering, Arts and Math)
- Create the right policies and regulation in order to decrease red tape in implementation of the migration related decisions across the sectors (both vertically and horizontally).

Shaping national economic diplomacy towards better positioning of Lithuania as destination to live and work is needed in order to compete with the national strategies of other EU countries, who already employed this strategic approach to attract foreign professionals and to cover structural gaps of human resource pool.

- Enhance economic diplomacy for the markets which outside the European Union. Diplomacy could serve as a tool to communicate and represent the social, economic, cultural competitiveness

of Lithuania to foreign partner countries or allies. Coordinated approach on Ministry level is needed (i.e. the case of Canada shows that merging two ministries Ministry of Foreign Affairs and Ministry of Trade under one ministry i.e. Ministry of Foreign Affairs, Trade and Development has stimulated economy after coordinating with foreign policy tools).

- To create a network of economic diplomacy agencies of Lithuania abroad to compensate structural gaps of quite weak and low density network of Lithuanian embassies, which now only very fragmentally cover the needs of international expansion of economy.
- Promoting idea of the collaboration of international enterprises with local universities and research centers to get a know-how and knowledge spillover to national economy. Government must build bridges for educational institutes, to market their services, and attract FDI through R&D.
- Attracting R&D focused FDI to Lithuania requires high- technology, highly-skilled specialists and favorable climate, policy wise. It not only creates an opportunity for the highly-skilled, but also stimulates reverse “brain-drain” by opening more opportunity in research and development and attracting the highly-skilled labour pool back to its origin.
- Even if Lithuania has a stronger rating fairly higher rating for higher education and training (5.3 according to GCI), the country struggles with quality of education system which is a little above the average (4/7) Lithuania educational system needs a reform. Reformed Education system could be enhanced as provider of educational services in Higher education market. Educational services export and the export of R&D of Lithuanian universities and colleges shall be an integrated element of national economic diplomacy along with other economic sectors.
- Improve international positioning of higher educational institutions abroad is crucial for full-fledged system to attract highly skilled professionals. Better visibility and clear positioning is needed via national platform for Enhancing Internationalization of Lithuanian Higher education. The stronger the quality of Lithuania’s educational system is the better ratings the universities will have which will lead to higher demand to attend them which brings inflow of capital and labour for the country.
- Elaborate more coordinated and coherent national approach to promote Lithuania as study and work destination (existing national platforms e.g. www.studyinlithuania.lt, www.renkuosilietuva.lt), are dispersed, have low visibility, overlap in terms of information, do not cover existing information gap).

Providing economic motivators has to be based on collaboration between public and private sectors: in order to prepare qualified labour force. Government not only needs to fund infrastructure and

educational system but also facilitate the dialog and collaboration between public and private sectors to jointly create the base for more attractive economic conditions. There is the necessity to:

- Encourage export-oriented, high-value-added local business. Because of population size Lithuania shouldn't focus on A to Z production process. Lithuanian bodies working on FDI attraction strategy must shift the strategy from "cheap and highly-educated labour force" to attraction of high-value-added well-paying jobs to Lithuania.
- Change the inward FDI strategy to R&D based which attracts and retain skilled labor force, to create the pool of work places for highly skilled , to create the critical mass if professional communities in selected sectors.
- Competitive wages for educators: in order to attract the best and the brightest to join the education system, academics and researchers must be awarded with a competitive wage.
- Continue improving public infrastructure to increase quality of life in the country.
- In order to solve the short-term challenges of emigration, make a list of high qualification which Lithuania lacks and simplify and standardize the process of hiring non-EU citizen for those positions.
- Give tax breaks not only in free economic zones but also for export-oriented high-value added and fast growth SME owned and operated by both locals and non-locals.
- Develop start-up visa related support to the best and brightest non-EU nationals.
- Offer an employment visa for coming to Lithuania to find a job, for highly-qualified talents which are in high-demand list of the labour market.
- Develop more liberal regulations on tuition fees to attract foreign student's enrollment and compete with neighboring countries (Poland, Estonia, Czech Republic etc.) in international education market.

Improving the legal status of foreign highly skilled professionals requires to focus on the following issues:

- Enhance national ratification of a Directive of the European Parliament and of the Council on the conditions of entry and residence of third-country nationals for the purposes of research, studies, pupil exchange, remunerated and unremunerated training, voluntary service and au pairing (COM 16512/14) to give targeted support for immigration of highly-educated talents from non-EU countries.
- Simplify employability of highly demanded professionals via further liberalization of work permit regulations for highly skilled professionals (as this is achieved for academic work at HEIs and non-private R&D centers).

- Make official migration and work conditions related information and regulating national documents available and assessable in additional languages e.g. English.
- Train civil servants effective communication, especially those working in immigration areas and labor market.
- Simplify family reunion for highly skilled professional's family members: lower the immigration barriers for family members of highly-skilled professionals and decrease financial barriers for family transition.
- Liberalize the labour code and launch flexible jobs, which shall enhance integration of foreign freelancers, students and other target groups into labour market.
- Simplify the possibility to get long-term work permits for foreigners especially for international degree and exchange students from non-EU countries studying in Lithuania.
- Open the services of labour exchange to skilled migrant professionals to find another job if they lose their previous job, enhance labour mobility of foreign professionals within the country. Provide foreigners the possibility to improve their knowledge through trainings offered to citizens and permanent residents
- Improve equality of rights and access to state support infrastructure to foreign workers (e.g. in Estonia, Germany, Canada etc.)
- Public campaign of the government and other stakeholders shall be launched to change the negative perception on the society towards immigration and immigrants.
- Make dual-citizenship possible not to lose Lithuanian citizens and their family members to wealthier nations.

The above mentioned elements are suggested as a framework of measures to be implemented in order to change the negative trend of highly skilled professionals' migration in Lithuania and to strengthen HR potential in the country.

CONCLUSIONS

The aim of this research has been to provide suggestions for drawing or making changes on a national policy towards attracting and retaining highly skilled professionals to and in the country; as positive dynamics of the highly skilled professionals pool of the country is a key factor to ensure international competitiveness and sustainable growth of the national economy.

The research has four chapters: the first chapter is a theoretical analysis, in which general overview of global challenges with respect to international migration of highly skilled professionals, the impact of migration on trade and international business, and recent trends on highly skilled mobility and their impact on competitiveness of a country has been discussed.

The second chapter deals with migration theories applied to migration of highly skilled professionals, the importance of human capital as an embedded element of country's competitiveness and societal knowledge management has been argued.

The third part is an empirical research based on analysis of statistics to reflect general trends of labour market structure in Lithuania, followed by country case analysis, a research based on experts view (structured expert interview to explore the gaps and major challenges to be tackled by Lithuanian decision makers when working on such strategy) and a survey on Lithuanian emigrants' opinion on the major drivers of migration, in order to get parallel insights how powerful are different motivators in emigrants' communities.

The analysis of the theoretical sources and empirical data has been proving interdependence of international business and international highly skilled mobility trends: investment agreements and FDI flows will also impact on, and be impacted by, the movement of labour internationally; the inflow of FDI increases an inward migration, and inward migration attracts more FDI due to availability of skilled labor. The shifting taking place in developed countries, transforming their economies to knowledge-based, and focusing on innovation has created a strong competition for talent among nations. Furthermore, demographic changes, aging population and low fertility rate is leading countries to design immigration friendly policies to balance the labour market.

Migration theories analyzed in the theoretical framework of this research do not show the full picture of why international migration of highly skilled professionals occur. Nevertheless, the push-pull model in particular gives a stepping-stone to analyze the motivators and barriers for highly skilled, in making migration decision. Migration motives on the one side faces countries attractiveness on the other side. And countries attractiveness to both, international business and highly skilled professionals hangs in the quality and applicability of country's strategy for the labour market, attraction and retention policy and competitive advantages for international enterprises to move to host countries.

Based on the empirical research it's evident that Lithuania needs a clear strategy for attracting and retaining skilled professionals in order to remain competitive. A lot can be done to improve the ecosystem for both incoming and returning migrants. According to MIPEx index Lithuania ranked 34/38 countries on the ability to attract and retain immigrants. The relationship between institutions needs to be strengthened for collaboration.

The future competitiveness of Lithuania will depend on the ability to create knowledge-based society and knowledge-based economy. Lithuanian government must consider knowledge export as one of the priorities to be achieved in the near future, due to the size of the market and limited natural resources, Lithuania would benefit more by making reform in higher education sector. Further research is needed on the role of higher institutions in attracting highly skilled labor; and the outcome of economic diplomacy in order to increase international trade and inward migration.

The recognition of Lithuanian higher education attainment certificates by other EU member states and universalization of education system globally could make Lithuania a destination of choice for international students; and that will provide Lithuania a revenue from education export but also availability to reduce the gap in the labour market for skilled professionals, increase its human capital pool.

Lithuania needs to build strategies and policies, and cooperation of institutions to implement them as economic and social development trends, generations, values, attitudes are changing. The suggestions elaborated on the basis of theoretical and empirical findings of this research are potential elements to be taken into consideration for development of Lithuanian policy to attract and retain highly skilled professionals in the country. The suggestions are divided into following parts: National strategy development, International economic diplomacy, Economic motivators, and Legal status of foreigners

Developing strategy on attracting and retaining highly skilled professionals is needed to cover existing lack of coordination and consistency among the initiatives of different policy making bodies (Ministry of Foreign affairs, Ministry of Social security and labour, Ministry of Interior, Ministry of Economy) and other stakeholders (Invest Lithuania, Enterprise Lithuania, Investors forum etc.) towards migration issue. Joint effort to elaborate the measures is needed to change the negative trend of highly skilled professionals' migration in Lithuania and to strengthen HR potential in general.

Shaping national economic diplomacy towards better positioning of Lithuania as destination to live and work is needed in order to compete with the national strategies of other EU countries, who already employed this strategic approach to attract foreign professionals and to cover structural gaps of human resource pool. Enhance economic diplomacy for the markets especially outside the European Union to attract R&D focused FDI to Lithuania and enhance international positioning of the country. Coordinated approach on Ministry level is needed to create a network of economic diplomacy agencies of Lithuania

abroad to compensate low density of Lithuanian embassies network, which serves the needs of the country inadequately.

Providing economic motivators has to be based on collaboration between public and private sectors: in order to prepare qualified labour force. Government not only needs to fund infrastructure and educational system but also facilitate the dialog and collaboration between public and private sectors to jointly create the base to enhance export-oriented, high-value-added businesses located in Lithuania and to create the schemes for more attractive economic conditions to highly skilled professionals.

Improving the legal status of foreign highly skilled professionals requires to focus on simplification employability and migration regulations of highly demanded professionals via further liberalization of work permit, ratification of EU directive on migration of researchers and students; as well on targeted support for immigration of highly-educated talents from non-EU countries and their families.

The above mentioned elements are suggested as a framework of measures to be implemented in order to change the negative trend of highly skilled professionals' migration in Lithuania, to enhance human resource potential and strengthen the international competitiveness of the country.

A handwritten signature in blue ink, consisting of stylized, overlapping loops and lines, positioned in the lower right quadrant of the page.

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APPENDIX

APPENDIX A. Origin and destination of students from and to Lithuania, Source: UNESCO Institute of Statistics 2017

Country of origin		Destination country	
Belarus	1,738	United Kingdom	4,867
India	234	Denmark	1,59
Russian Federation	229	Poland	950
Nigeria	219	Germany	849
Spain	182	Netherlands	804
Ukraine	164	Russian Federation	375
Azerbaijan	155	United States	297
Poland	120	France	260
United Kingdom	114	Sweden	210
Israel	110	Latvia	209
Sweden	107	Norway	187
Germany	88	Italy	182
Turkey	86	Belarus	129
United States	76	Spain	121
Lebanon	74	Finland	112
Italy	73	Switzerland	83
Latvia	69	Austria	82
Georgia	61	Ireland	76
Republic of Moldova	55	Belgium	56
Ireland	47	Ukraine	48
Congo	36	Japan	45
Pakistan	36	Iceland	30
Korea, DPR	24	Estonia	29
Norway	23	Hungary	29
Kazakhstan	21	Australia	28
Austria	21	Canada	24
Nepal	19	Turkey	21
Cameroon	18	Greece	18
Estonia	18	Czech	17
France	18	Portugal	17
China	15	Cyprus	15
Sri Lanka	14	United Arab Emirates	11
Hungary	13	Israel	11
Albania	12	Georgia	10
Netherlands	12	Korea, Rep.	10
Tajikistan	11	Luxembourg	8
Finland	11	Bulgaria	7
Bangladesh	10	New Zealand	7
Syrian Arab Republic	9	Slovakia	7

Serbia	9	Slovenia	7
Brazil	8	Brazil	< 5
Armenia	8	China, Hong Kong	< 5
Iran, Islamic Rep.	7	Malta	< 5
Belgium	7	Armenia	< 5
Ghana	6	Bahrain	< 5
Kyrgyzstan	6	Chile	< 5
Uzbekistan	6	Colombia	< 5
Switzerland	6	Grenada	< 5
TFYR Macedonia	6	China, Macao	< 5

Comprehensive Ranking System (CRS) Criteria – Express Entry
Summary of maximum points per factor for Express Entry candidates

A. Core / human capital factors

Factors	Points per factor - With a spouse or common-law partner	Points per factor - Without a spouse or common-law partner
Age	100	110
Level of education	140	150
Official languages proficiency	150	160
Canadian work experience	70	80

B. Spouse or common-law partner factors

Factors	Points per factor (Maximum 40 points)
Level of education	10
Official language proficiency	20
Canadian Work Experience	10

A. Core/human capital + B. Spouse or common-law partner factors = Maximum 500 points (with OR without a spouse or common-law partner)

C. Skill Transferability factors (Maximum 100 points)

Education	Points per factor (Maximum 50 points)
With good/strong official languages proficiency and a post-secondary degree	50
With Canadian work experience and a post-secondary degree	50
Foreign work experience	Points per factor (Maximum 50 points)
With good/strong official languages proficiency (Canadian Language Benchmark [CLB] level 7 or higher) and foreign work experience	50
With Canadian work experience and foreign work experience	50
Certificate of qualification (for people in trade occupations)	Points per factor (Maximum 50 points)
With good/strong official languages proficiency and a certificate of qualification	50

A. Core/human capital + B. Spouse or common-law partner + C. Transferability factors = Maximum 600 points

D. Additional points (Maximum 600 points)

Factor	Maximum points per factor
---------------	----------------------------------

Post-secondary education in Canada	30
Arranged employment	200
PN nomination	600

A. Core/human capital + B. Spouse or common-law partner factors + C. Transferability factors + D. Additional points = Grand total – Maximum 1,200 points

APPENDIX C. Experts View Questioner

Questioner

This questioner is designed to collect a research data from major organizations, making legislation on one hand and those who are directly impacted by the legislations on the other; in relation to attraction and retention of highly skilled professionals. The purpose of the questioner is to figure out if Lithuania has a clear strategy for attracting and retaining highly skilled professionals.

Please evaluate from 1 to 10 (1 –don't agree, 10 – fully agree) the following statements

- 1- Lithuanian higher education institutes fulfil the demand of the market for **highly skilled labour**.
- 2- Lithuania has a clear strategy for attracting and retaining highly skilled labour force.
- 3- The quality of graduates satisfy the demand of the labour market.
- 4- Lithuania has a right strategy in attracting investment based on the ability of the labour market.
- 5- Lithuania has a clear human capital strategy (to attract and retain HSL) in order to tackle short-term challenges due to the declining tendency of human capital pool.
- 6- Lithuania has a clear human capital strategy to reach long-term challenges due to the declining tendency of human capital pool.
- 7- Lithuania's strategy for attracting and retaining highly skilled labour force is competitive in comparison to other EU member states.

Please share your opinion

- 8- Name the top three most important economic sectors of Lithuania which suffer from the highest demand of HSP (Highly **skilled professionals**).
- 9- -Name the top three economic sectors of Lithuania where you would recommend to focus if creating a new sectorial policies//strategy to attract HSP?
- 10- Name the top three economic sectors of Lithuania where the major barrier for FDI is lack of qualified professionals/ HR?
- 11- What are the main motivators' (factors) of the highly skilled labour force attraction and retention to any country?
- 12- What are the main barriers of the highly skilled labour force attraction and retention to any country?
- 13- What has to be changed in Lithuanian policy towards attracting and retaining HSP? The nearest future to assure competitiveness of the national economy?

Thank you for your sincere response.