INTERNATIONAL ECONOMIC MIGRATION IN OECD COUNTRIES

Discovering economic costs and benefits, and finding recent migration trends

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International Business
Bachelor's Thesis
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Objectives

The main objective of this study was to find studies regarding both the economic effects of immigration and emigration. Additionally, the study had an objective to search for patterns of international migration in the OECD countries to find out where migration peaks have taken place in the last few decades. It is important to examine international migration, since flows of migrants have accelerated due to globalization and a growing world population, for example.

Summary

This paper draws conclusions based on secondary sources and calculations that use public data figures. There is a gap in source availability between immigration and emigration, which makes it more difficult to study the economic effects of emigration, compared to examining the effects of immigration. Migration trend wise, the US has had active inbound, and Germany outbound flows of migrants in the 21st century.

Conclusions

It appears that straightforward, general conclusions are not possible to make in most economic aspects, since there are many variables that affect the economic results of migration. Certain demographics of migrants, like the age and skill level, are important factors that define the economic effects of migration. Also, public structures of host countries affect the behavior and assimilation of immigrants.

KEY WORDS: IMMIGRATION, EMIGRATION, ECONOMICS, LABOUR, OECD

Language: English

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1. INTRODUCTION
Due to globalization and the dynamically changing nature of political and social circumstances in many countries nowadays, workers are increasingly interested in migrating to other countries in hope of better benefits and working conditions. At the same time, policy makers need to come up with immigration policies beneficial to their country, and company managers look for inexpensive but highly skilled labor force. Thus, a conflict of interests might occur between the different stakeholders. It might also be difficult to discover the thorough implications of labor migration due to the complexity of migration as a phenomenon.

It can be difficult to judge whether the influence of migration on the economy is exhaustively negative or positive, because often times there are both winners and losers in the outcomes of migration. However, it is important for business managers and policy makers to be aware of how the flows of people affect the economy, because the patterns and trends in migration can be relatively responsive to different triggers in the social, political, and economic environment. That way the responses to those flows can be adequate and justifiable, which helps to prevent economic and social problems more effectively. Thus, the two main objectives of this study are to discover the economic costs and benefits that stem from migration, examining the matter both from the perspective of migrant-sending and migrant-receiving countries to form a more complete picture of the aggregate effects.

The research questions to which this paper seeks answers to are the following:

1. What are the costs and benefits of immigration for the receiving countries?
2. What are the costs and benefits of emigration for the sending countries?
3. Which are the most recent labor migration peaks and trends?
The exact research objectives, derived from the research questions above, are as follows:

1. Find studies regarding the effects of immigration, both short-term and long-term.
2. Find studies regarding the short-term and long-term effects of emigration, and especially: See if emigration can be beneficial for the sending country in long-term.
3. Compare different data and cases of noticeable immigration and emigration to find the latest peaks and trends.

To broaden the understanding of international migration, a complementary element in this research paper will be to discuss and analyze some of the recent migration trends that can be revealed from available data. Furthermore, to justify these trends, some driving forces of migration will be discussed briefly together with the theoretical model of migration and the discussion of migration trends. Anyhow, the primary focus is on the economic effects of international migration. To restrict the research, the OECD member countries have been chosen as the region of scrutiny, and the type of migration that concerns this study is economic migration. For a full list of OECD countries as of 15th of March 2018, see Appendix 1.
2. LITERATURE REVIEW

2.1. Introduction

The following section of the paper will assess the available literature on the economic costs and benefits of international labour migration, which includes a theoretical aspect and an empirical viewpoint. The literature has been categorized into immigration-related and emigration-related to make a clearer distinction between the two subcategories of migration and the different effects that they have on the economy.

Some of the most debated themes that appear in the literature include the fiscal effects of immigration, the wage effects of immigration in the labour-receiving country, and the impact that the loss of highly skilled workers might have on the economic development of a labour-sending country. Supposedly due to a lack of sufficient data, there are not as many resources on emigration as there are on immigration, and this difference is visible in the following review of the relevant literature.

To mention some of the most influential researchers in the field of migration economics, Alan Barrett, Frédéric Docquier, Sari Pekkala Kerr, and William Kerr appear relatively frequently, and also have provided many sources to this paper. Since the focus of scrutiny here are the OECD countries, the OECD database also serves as an important source of reports and studies.

2.2. Definition of migration

Migration refers to the geographical movement of people, and the type of migration that is under examination in this particular paper, is international migration. That is, people who migrate from one country to another. The focus of the paper as whole is on labour migration, which also applies to the following scrutiny of the literature found on the subject of international migration. A labour migrant is a synonym for an economic migrant, the definition of which is ‘a person who leaves their home country to live in another country with better work or living conditions’ (Cambridge Advanced Learner’s Dictionary, 2013).

Migration can be divided to immigration and emigration. As defined by Allen (1990), immigration is the act of coming as a permanent resident to a country other than one’s native land, and emigration refers to leaving one’s own country to live in another.
Migrants can be further categorized based on different aspects. For example, migrants can be divided into low-skilled and high-skilled migrants, and such differentiations can be essential in assessing the effects migration has on the economy.

2.3. Theoretical model of labour migration – basic model

Figure 1 illustrates the theory of a wage level incentive for the workers in the Southern parts of the world to migrate to the North. In the South, the productivity of the workers is lower compared to the North, which leads to the wage level being lower as well – \( W^S \) represents wage level in the South and \( W^N \) represents wages in the North. According to McAleese (2004), this creates an incentive for the workers in the South to migrate to the Northern countries, which eventually influences the wage levels and labour supply in the two regions. Wages in the North will decrease and wages in the South will increase until an equilibrium is achieved: the crossing point of \( D^S \) and \( D^N \), marked with \( W^* \) and \( L^* \) in the axes.

![Labour migration in the basic model](image)

When labour supply and wages in the North and in the South are in an equilibrium, the wage gap incentive for migration no longer exists. Marked with blue in the graph, the ABE area shows the welfare gain that occurred from the free movement of labour between North and South. It should be noted that the theory presented simplifies many assumptions and presumes that there are no other factors besides the wage incentive.
that affect migration decisions, which is not necessarily the case outside this theoretical framework.

Geis et al. (2013) and Castles (2013) also highlight the principal driver for international migration to be the perceived opportunity to earn higher income or reach a higher level of productivity in another country. The decision to migrate is ultimately made when the personal utility that would be achieved by migrating to the North, corrects the disutility that stems from the moving process. This is why, if the wage gap is not very significant between North and South, the incentive to migrate can be negligible (McAleese, 2004).

Thus, wage gaps can distort the impression of the depth of the incentive to migrate. According to Chiswick (2014), the observed migration flows are marginal, taken into account the income differentials among countries, which is due to the disutility from migration often being too high compared to the expected utility in the destination country. Disutility and utility cannot be measured quantitatively (Vebelmesser at al., 2013), but the disutility can be composed of monetary costs such as travel costs, together with implicit costs like language assimilation and time spent searching for a job (Chiswick, 2014).

Ravenhill (2011) notes that when labour force can migrate freely, the world output of goods and services increases due to higher productivity of workers and corresponding earnings. Free migration improves economic efficiency, since labour flows react to price signals the same way as trade flows. This efficiency effect and growth in total output suggest that the GDP rises in the countries where output grows, and that unemployment should decrease when labour force is located more effectively in the world. Furthermore, the standard economic analysis recognizes the importance of the different factors of production, which include capital, land, and high-skilled and low-skilled labour, because migration can affect the relative supply of them.

Immigration always has a negative influence on the earnings of the local workers with similar skills as the immigrants, and the local holders of other factors of production, on the contrary, always benefit from immigration, based on factor-proportions analysis (Ravenhill, 2011). That is, in the case of low-skilled immigrants they increase the
earnings of high-skilled immigrants, land owners, and capital holders, for example, but lower the earnings of the local low-skilled workers in the host country.

According to Ravenhill, factor-proportion analysis findings affect the policy preferences of individuals. It would be good to note, though, that not all the members in the host country necessarily know this well how migration affects the local economy, and that the residents in the host country can be more concerned about other effects that immigration can have in the country. Thus, the wage effects are likely to be just one component affecting the policy preferences of the host country nationals.

2.4. Costs and benefits of migration for a labour-receiving country

2.4.1. Economic growth and labour market effects

In Europe, Ireland used to be a net receiver of economic migrants, so it is interesting to examine how this particular country was influenced by the somewhat sudden flow of immigrants from Eastern Europe after the EU enlargement in 2004. One of the most general parameters that can be examined to discover the economic effects is the Irish Gross National Product (GNP)\(^1\). Barrett et al. (2006) made a noteworthy study regarding the effects of an immigrating labour force on the Irish labour market, making a distinction between the unskilled and the skilled labour force.

After distinguishing between high and low level skilled workers, they divided the highly skilled labour force even further to see if the immigrants were hired corresponding to their skill level. If they were, the GNP was detected to increase by 3.5-3.7\%\. If skilled labour was hired in positions with evidently lower skill requirements, the increase in GNP was only 3\%\: this is because the immigrants did not influence the wage level of highly skilled labour force by lowering it, which in turn would have led to an increased competitiveness of Ireland.

In the scenario where the immigrants were low-skilled, the GNP rose either way, but the effect on the wage level of the low-skilled labour was negative; the wage level of

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\(^1\) Gross domestic product (GDP) is ‘the total value of goods produced and services provided in a country in one year’ (Allen, 1990) and gross national product (GNP) is ‘the GDP plus the total of net income from abroad’ (Allen, 1990). It is better to use GNP in the case of Ireland because, unlike GDP, it reflects the investment income that Ireland pays abroad, which is a result of substantial amounts of foreign direct investment (FDI) that Ireland has received during the last decades.
the low-skilled labour force fell by 3.7%, and their unemployment rate rose by 4.1% – a combination which implies a decline in living standards. The study seems to have more value than others that look at the same matter, because it gives so much consideration to the different variables that affect the end results. It appears that making the distinctions was fruitful in terms of making detailed, accurate conclusions, and it was evident that the outcomes in the economy are dependent on the skills and the employment situation of the immigrants.

Continuing with the importance of distinguishing between different skill levels and other dividing factors, it seems that contrary to common beliefs, positive selection patterns are highly present in the demographics of immigrants in the OECD countries (Docquier et al., 2014). In practice, this means that the best educated and the most highly skilled are the dominant group who migrate, as opposed to the unskilled labour force, and this pattern is especially visible for less developed sending countries, according to the authors. The same study also indicates that most of the immigrants in OECD countries are, in fact, from other OECD countries, and that due to the positive selection patterns, the portion of college graduates is somewhat remarkable. These findings are valuable, since they can help to correct certain distortions in the prevailing beliefs regarding immigrant demographics in the developed countries.

The most important findings of Docquier et al. (2014) were that in the long run, the effect of immigration was always positive – even though mild – on the wages and employment of the less educated, non-migrant natives in the destination country. The underlying reason was the high level of education of the immigrants in OECD countries in 1990s and 2000s. Thus, the findings are similar to those of Barrett et al. (2006), as the outcome for the receiving economy is found to be positive when the immigrants are highly educated.

On the other hand, some contradiction can be detected: Barrett et al. (2006) looked at the outcomes specifically in the Irish economy. They found a negative effect on the wages of the low-skilled native workers and their employment rate when the immigrants were low-skilled, even though the outcome in the Irish GNP remained positive in all scenarios. This corresponds to the basic theoretical model of labour migration, which states that immigration always harms the part of the society that is
skill-wise closest to the immigrants. Docquier et al. (2014) do not look at the outcomes of low-skilled immigration on the wages and employment level of the unskilled native labour force, but merely claim the immigrants in OECD countries to be so highly skilled that the outcome is always positive. Theoretically, the highly skilled workers should be better off, but not in the scenario where the immigrants are also highly skilled.

Orrenius and Zavodny (2007), too, found a decrease of 5.2%, at highest, in the wages of low-skilled labour force due to immigration in the USA. There was no evidence of an impact on the wages of more skilled workforce. The researchers also found that the more time the immigrants spent in the USA, the more they affected the depth of decrease in the wage-level of the low-skilled, mainly because over time they blend into the native workers by becoming more like them in terms of skills and capability. Consequently, they become substitutes for the native, non-migrant workforce, and thus increase competition in wages. Additionally, it was found that the lower the skill level of immigrants, the more negative the effect on the wages of low-skilled native workers. That is, the conclusion correlates with the one of Barrett et al. (2006).

Ortega and Peri (2011) looked into the short-term effects of immigration. Their findings reveal that immigration improves the employment rate in the destination country, not just for the immigrants, but also for the native workers. The rationale behind the improved employment situation of the natives is that the native workers provide additional skills compared to the new, immigrated workforce, and that way gain an advantage in the labour market and also create demand for new kinds of jobs at firm level.

On the other hand, a finding that neutralizes the discovered positive employment rate effect a bit, is that low-skilled labour immigration seems to have a negative effect on total factor productivity (TFP) in the long run. This is because low-skilled immigration has been noted to expand the labour-intensive service sector that cannot be exported, and which typically has a low TFP – home care, for example. Other sources, like a paper by Aleksynska and Tritah (2009), support the findings regarding the reaction of TFP to immigration. The authors conclude that low-skilled immigrants have a negative impact on TFP in the long-run, whereas skilled workforce had a very neutral effect on TFP, incomes, and productivity.
Aleksynska and Tritah (2009) also discuss skilled immigrant workers who are misallocated in less productive sectors, which, according to them, also contributes to the negative development of the TFP. Even though it seems like many factors worsen the TFP of a labour-receiving country, the authors state that the aggregated result of immigration on the income and productivity of the host country tends to be positive. Consequently, the long run TFP effect of low-skilled immigration is not very noticeable in the aggregated economic outcome in the host country. Still, TFP is a measurement of how well inputs are being used, so it is an interesting indicator to consider when looking at migration, labour markets, and productivity.

2.4.2. Fiscal effects

Some people are concerned about highly developed countries being exploited when immigrants from poorer countries migrate to them and get a chance to join the welfare system. Martinsen and Rotger (2017) studied the fiscal condition of Denmark between years 2002 and 2013, a time period during which the number of EU immigrants in Denmark rose from 53,782 to 159,857. Their findings are stated as applicable to other types of welfare states as well, not just Denmark, which makes the study pivotal in the examination of fiscal effects of immigration.

The age of the immigrants has the biggest impact on the fiscal state of a welfare country (Martinsen and Rotger, 2017). The age groups with the highest potential need for transfer payments and other benefits are children and retired citizens. The most beneficial immigrant group tends to be working young adults, since they provide the host country with tax revenue and personal expenditure, but do not need unemployment benefits nor yet receive retirement allowance. Young working adults have been the dominant migrant group to Denmark (Martinsen and Rotger, 2017), and also to the USA (West, 2011), which suggests that at least these countries may have benefitted from immigration. Martinsen and Rotger do, indeed, find EU immigrants in Denmark to have raised the amount of net tax payments to the government.

The skill level of immigrants is another crucial factor in predicting whether the immigrant will assimilate into or out of welfare dependency and what the net fiscal effect of migration will be in the receiving country (Boeri, 2010). More social spending
is, naturally, detected on low-skilled immigrants, especially when examining the richest welfare states, claims Boeri. In addition to the immigrant demographics, the time period spent in Denmark was a variable that was paid attention to, but it was found almost insignificant. Thus, immigration is beneficial to the fiscal state of a tax-financed welfare country, with the condition of young working adults being the main immigrating group. The view is supported by Pekkala Kerr and Kerr (2011), who also find the age and educational level of immigrants to be the factors that best help to predict the net fiscal effect in the host economy.

Sarvimäki (2011) explored the assimilation of non-OECD and OECD immigrants to Finland, another Nordic welfare state, in years 1993 – 2003. He found that non-OECD households received twice as much income transfers than native Finns or OECD immigrants, and that it was only after 20 years in the country that the difference evened out to the level of natives and OECD migrants. Thus, immigrants coming from outside the OECD countries are significantly more expensive to Finland than OECD immigrants.

What Sarvimäki leaves out is a final remark whether the non-OECD immigrants have or potentially will have a draining fiscal effect in the public resources of Finland, so his work does not directly help to judge whether immigration in Finland’s case is good or bad for the economy. Still, the difference regarding welfare dependency between OECD and non-OECD immigrants is an interesting detail that may be applicable to other tax-financed, non-English speaking welfare states as well. Adding to the findings of Sarvimäki (2011), Pekkala Kerr and Kerr (2011) conclude that immigration generally has a positive, although very small, fiscal effect on the host country, but also that the recent immigrants to Europe are more and more likely to use social welfare upon arrival. It depends on the length of their stay whether the welfare spent on them will eventually be collected back in the form of a working immigrant’s tax payments, for example.

Barrett has conducted many important studies regarding the fiscal effects of migration and his name pops up in many cooperative studies on the subject. Barrett and Maître (2013) looked at whether immigration costs excessive amounts of welfare payments to the European countries, and which were the welfare payments most needed buy
immigrants. Three main findings came up; In all social support payment categories, there was no sufficient evidence on immigrants being excessive users compared to natives. The only support payment that in a restricted number of countries benefitted immigrants rather than natives was unemployment payments.

Secondly, immigrants proved to be not at all that prone to benefit from old age, disability, or sickness related payments, but rather from unemployment and family related ones. Lastly, immigrants were found to be in high risk of poverty across Europe, partly due to their avoidance of social payment withdrawals, which was the most crucial finding to Barrett and Maître who recognized a ‘threat of intergenerational transmission of disadvantage’ (Barrett & Maître, 2013).

Relative to the natives, immigrants in Ireland were half as likely to have received social welfare payments between years 1994 and 2004 (Barrett & McCarthy, 2007). Immigrants were also found to use welfare support less extensively than the natives did, and the country never experienced any drain of welfare resources due to immigrants. Considering the effusive flow of immigrants to Ireland during the stated time period, the study and its results are valuable in the examination of the fiscal effects of immigration.

A later study by Barrett and McCarthy (2008) states that Germany has shown higher usage of welfare payments by immigrants compared to the welfare dependence of the natives, and that this difference can be explained by immigrant characteristics. Barrett and McCarthy warn that if immigrants are not able to assimilate out of welfare dependence, the risk is that a structural state dependence is developed and that immigrant networks encourage other immigrants to also rely on the benefits (Barrett & McCarthy, 2008).

2.4.3. Gaps in labour resources in host countries
Pekkala Kerr and Kerr (2011) highlight the importance of fiscal policies regarding immigration, since the ageing population is already a factor of potentially higher taxation in the near future in Scandinavia and other Northern European countries. At the same time, Westmore (2014) and Esses et al. (2012) conclude that many of the
OECD countries rely on immigration in order to maintain sufficient balance of resources in the future.

Esses et al. (2012) discuss the attitudes of the natives in the USA towards immigration and immigrants. Due to an increasingly more popular negative attitude towards immigration in the country, states like Arizona and Georgia have made stricter policies regarding the checking of identification papers of immigrants. The anti-immigration attitudes and the new policies have made the environment in the two example states less welcoming for immigrants, both legal and illegal, and consequently, the number of labour immigrants has decreased noticeably.

Redman (2011) cited in Esses et al. (2012) estimated that due to the lack of labour force that resulted after the policy changes in the example states of the USA, the Georgia Fruit and Vegetable Association was in the risk of losing as much as $300 million worth of harvest in 2011, because the lack of workers led to the corps spoiling before getting picked. Putting together all the states of the USA, the estimated worth of lost crop annually reached $9 billion (Gray, 2011 cited in Esses et al., 2012). Thus, it seems that immigration is an important source of labour force in some industries, and that the gap that appears when immigration flows pull back is not easily replaced by natives.

2.4.4. Human capital and FDI gains from immigration

A research paper by Duleep (2015) suggests there are two types of human capital: general and country-specific. The general type of human capital refers to and is obtained by years of schooling. The transferability of country-specific human capital to the host economy depends on the country of origin of the immigrant and the admission category in which the immigrant has accessed the country.

Duleep studied the USA and discovered that the two types of human capital are where differences in the incomes of immigrants’ stem from. That is, low transferability of country-specific human capital can affect the earnings of the immigrant negatively in the host country. A high level of general human capital, on the contrary, increases the possibilities of the immigrant to receive a relatively high wage. The income divergence
tends to moderate with time spent in the USA, which is due to the immigrants with low skill-transferability becoming more alike to the natives professionally.

Some research pieces previously discussed in this paper have shown that the negative economic effects of immigration are usually more applicable to the migrants in low-skill jobs, rather than to the highly skilled migrants in more skill-demanding jobs. Duleep (2015) brings a new point of view to the matter of immigrants with low-skill-transferability and low incomes. According to her, immigrants of that type are also a potential benefit to the USA economy, because they can develop business areas that would not be developed in other circumstances.

Furthermore, immigrants that migrate for family-unification, provide flexible human capital, and may invest in the expansion of their skills and human capital. This can show as them attending university or other forms of tuitional education in the USA. Their skill-acquisition may further lead to innovation and entrepreneurship, concludes Duleep (2015). Apparently, low-skill-transferability immigration can develop employment for other immigrants through ethnic networks, and this can decrease employment competition with native job seekers. Duleep sees potential in the immigrating populations, but the extent of optimism presented in her research should be dealt with caution.

In addition to enabling additional human capital investment outside of the native population, immigration also appears to have certain effects on foreign direct investment (FDI). The topic was researched by Murat & Pistoressi (2009), and Kim & Lim (2011). The latter investigation was concentrated on the USA and drew conclusions regarding the interaction between flows of FDI and immigrants. One of the most central findings was that labour flows cause FDI flows. Murat and Pistoressi (2009) developed a case study of Italy, which showed that migrant networks boosted bilateral FDI between Italy and other countries. Furthermore, they found that inbound FDI to Italy from geographically distant countries experienced a significant positive effect from immigration.

Murat and Pistoressi (2009) found that inbound FDI took place mostly between Italy and developed countries that were to some extent similar to Italy. Also, immigration’s
positive effects on FDI towards the host country were found to be especially important to small and medium size firms, because they – small firms in particular – typically have the most difficulties in investing abroad, compared to larger firms.

Lastly, Kim and Lim (2011) state that inbound FDI and imports to the USA are substitutes. The Heckscher-Ohlin theory supports this view to a wider sense. The theory states that trade is merely a consequence of imperfect spread of production resources – such as capital or labour - across the world. Even though also referred to as ‘economic fiction’ (Leamer, 2014), the Heckscher-Ohlin theory, accompanied by the conclusions of Kim and Lim (2011), provide valuable insights, because it leads to the conclusion that if the country obtains FDI, as through immigration, its imports are predicted to decrease.

When imports decrease, a country’s current account will improve towards a balance of imports and exports, or even a surplus of exports. Such improvements in economic measures are considered to be greatly important to a country’s overall economic wellbeing. Thus, evolving the thoughts of Kim and Lim (2011) and the ideology provided by Heckscher-Ohlin, the following conclusion can be drawn on a theoretical basis: Immigration can lead to the improvement of the host country’s current account. Whether the conclusion of Kim and Lim (2011) can be applied to other countries besides the USA, remains to be confirmed.

2.5. Costs and benefits of migration for a labour-sending country

2.5.1. Constraints in the discussion on economic effects of emigration

Docquier et al. (2014) state there is a distortion in how much the effects of immigration have been studied as opposed to how much attention the effects of emigration have received research-wise. This difference is, indeed, visible when searching for academic resources, and the lower availability of sources regarding emigration and its economic effects should be noted in this section of the paper.

Further constraints on emigration research are addressed by the OECD Development Centre (2007). It appears that generalizations upon the subject are very hard to make from the sending country point of view, because the economic effects vary depending
on the position of the emigrants within the migration cycle that consists of five stages: exit, adjustment, consolidation, networking, and return (OECD, 2007).

According to Wescott and Brinkerhoff (2006), some countries in Africa – even though none of them is part of the OECD, serve as an example scenario here – receive very few returning skilled migrants compared to many other geographic regions, so the economic effects of brain drain in such countries can be very different to those that have a high ratio of returning migrants.

Wescott and Brinkerhoff list other particularities to which the economic effects are very sensitive besides the country of origin of the migrants. The traits of the receiving country, the way how possible remittances are used in the households in the home country, the professions of the migrants, and the time frame of examination are all examples of variables that have an impact on the economic effects in the sending country. Additionally, it is not only for the sensitivity of the economic effects that exhaustive conclusions are very difficult to make, but for the lack of data as well.

Furthermore, advances in technology are changing the nature of talented workforce emigration (Commander et al., 2004). Technology enables removing the constraint of geographical locations that used to lead to a clear-cut loss of skills once workers migrated to other countries. Thus, the nature of mobility is changing, which makes it even more difficult to assess the economic costs and benefits of emigration. Furthermore, Tung (2008) states that migration is no longer as straightforward and permanent as it used to be. She uses the concept ‘brain circulation’ to refer to a more circular movement of labour force across countries, and the blurring of the definitions of ‘brain drain’ and ‘brain gain’.

Emigrants are increasingly more inclined to maintaining transnational connections between their host and home countries due to advanced transportation and technologies (Castles, 2013) – the existence of social media, instant messaging, and free video calling applications play a big role in the maintenance of connections to the home country. These modern technologies can be increasingly more important as a driving force of migration in a couple of different ways. For example, the experiences of diaspora in the receiving country can reach a wider audience via social media posts.
Secondly, the existence of technology that enables easy communications across borders with family members, for example, may lower the barrier to migrate abroad. Since social media and free communications applications are still relatively new, but have spread quickly, their long-term effects on incentives to migrate and barriers of migration, for example, are still to be discovered.

2.5.2. Economic growth effects

Researchers like Campos-Vazquez and Sobarzo (2012), Mountford (1997) and OECD (2007) agree that migration can have a positive effect on the GDP of the sending countries. Mexico, the most important source of immigrants to the USA, has benefitted from emigration in terms of fiscal benefits generated from remittances, and the remittances of the expats form a relatively considerable part of the GDP of the country (Campos-Vazquez & Sobarzo, 2012). Economic growth can also be achieved through increased productivity in the sending country, when some of the workers migrate to new locations decreasing the home country labour supply so that it gets closer to the level of labour demand (OECD, 2007 & Commander et al., 2004).

To be discussed in further detail in an appropriate section of this paper, Mountford (1997) introduces a growth externality function which indicates that there are gains in average human capital and economic growth in the sending country under both general and selective migration. On the other hand, some criticism could be presented towards such a straightforward way of claiming inevitable economic growth to stem from emigration.

There are also authors who claim that emigration has a negative effect on the GDP growth development of the sending country. For example, Kasnauskiene and Šiaudvytis (2011) appraise that emigration results in loss of GDP and welfare for the sending country, but that the depth of the losses may have been underestimated due to the lack of proper data on migration. Commander et al. (2004) are cautious about drawing conclusions on economic growth effects in the labour-sending countries, and state that much more research is required on the subject to find out the actual magnitudes. They figure the profession and industry of the migrating workers to be in a key position in determining the ultimate effects on home country growth.
2.5.3. Labour market effects

Docquier et al. (2014) looked at the opposition of high-skilled and low-skilled emigrants and how emigration affected wages. They found that the loss of talent and intelligence was more remarkable than the loss of unskilled workforce in numerical terms in the net sending countries. The effect on the wages of the low-skilled workforce that stays in the home country was negative, with an income loss of 1 to 6% detected in Cyprus, Malta, Ireland, New Zealand and Portugal.

Mountford (1997), OECD (2007), Commander et al. (2004) and Kasnauskiene & Šiaudvytis (2011) have opposing findings regarding the wage level effects. They state that the wage level in the labour-sending country rises as a consequence of emigration. Most of them do not editorialize whether the rise in the wage level is good for the source economy in the long run, apart from equality promotion. Commander et al. makes an exception by taking a negative stand. The authors state that the changes in the wage setting may aggravate the efficiency losses stemmed from emigration.

Mountford concludes in his paper that brain drain may actually increase the income level in the sending country and improve income equality in the long run in a small, open economy. OECD (2007) also states that emigration can have lifting effects on the home country income levels, even more clearly so when the migrating workers are low-skilled. They justify the statement with reduced pressure on the remaining workers in the labour market of the sending country, which lowers the supply of low-skilled workforce and, consequently, raises its value. Although it is a positive change for the low-skilled, the capital holders, land owners and high-skilled labour force are worse off earnings-wise, since the workforce they need for production operations is now more expensive.

Kasnauskiene and Šiaudvytis (2011), too, found the reduced labour supply caused by emigration to increase wages in the sending country. This leads to a redistribution of income from the capital holders to the workforce, so their finding supports Mountford’s claim on improved income equality in the economy. Kasnauskiene and Šiaudvytis further estimate that due to poor data on migration, the effect of emigration on aspects like income levels and redistribution of income may have been underestimated in some countries in Europe. Their study focused on the new EU members of 2004, and they...
mention Slovenia, Czech Republic and Estonia as such countries. Anyhow, they determine the effect on wages to be positive.

2.5.4. Human capital development in a sending country

Mountford (1997) provided a theoretical approach to the relationship between the technological development in a country – which is an important contributor to overall development and economic growth – by presenting it in the form of a function. According to the author, the level of technological progress at time \( t+1 \), \( \lambda_{t+1} \), can be presented as a function of the average human capital at time \( t \), \( L_t/N \), where \( N \) is the number of agents in the generation and \( L_t \) is their total human capital in the economy.

Mountford notes that the model also serves as a growth rate of productivity. A change in the average level of human capital results in a change in \( \lambda \), which in turn results in investments in human capital by the young members in the economy, Mountford claims, and this further adds to the change in \( \lambda \). The growth of both \( \lambda \) and \( L/N \) can, theoretically, grow uninterruptedly. It should be taken into account that the theoretical approach of Mountford’s leads to these conclusions possibly not being fully applicable outside the theoretical scope, since causations tend to be much more complex in practice.

Acknowledging that the level of technology is an important factor in the growth of an economy, we may further assume that based on the equation, improvements in human capital are essential to development and growth in the country. Tung (2008) addressed the importance of human capital as the most central factor in the maintenance and acquisition of international competitiveness. Thus, the changes in the average human capital are worth the attention of research when discussing the economic effects of emigration.

The concept “brain drain” bears the belief that when skilled labour exits a country, the net effect on the home country is negative, talent-wise. Commander et al. (2004) claim the net loss of talent to be a transaction cost, a short-term trade off that eventually results in development in the home country. Their theory suggests that the emigrating, talented workers act as a motivating example for the people in the home country, which
motivates them to obtain more education and grow their human capital, which in turn can promote growth in the source country.

It seems that the effect of emigration on the educational incentives and human capital development in the home countries of migrants cannot be generalized easily. For example, Campos-Vazquez and Sobarzo (2012) examined Mexico, where the emigration trend to the USA seems to have lowered the interests of the Mexicans to obtain a high level of education due to a demand for low-skilled Mexican workers in the USA. Wescott and Brinkerhoff (2006) found, too, that a noticeable part of Mexican emigrants is low-skilled, in comparison to the portion of low-skilled emigrants from other countries.

Beine et al. (2011) find diasporas to accelerate migration flows and to weaken the average level of education of the emigrants. Thus, apart from potentially lowering the educational interests of the people that stay in the home country, diasporas can have the same effect on the subsequent emigration flows. On the other hand, Campos-Vazquez and Sobarzo note that the need for the low-skilled workforce in the USA is weakening because of changes in the US economy, so the educational decisions of the Mexican migrants may respond to that in the near future.

Shimada (2013) argues there are two sides to the issue. An important factor to determine whether the home country nationals are to improve their educational status and overall human capital, is the selection of privately funded education in a country where education is chargeable. He finds there to be a positive correlation between emigration possibilities and increases in the costs of education in the home country, since the emigration possibilities encourage people to obtain more education. Consequently, this is prone to lead to a decrease in the average human capital of the country, if the private sector cannot offer more educational options, he states.

Continuing with the subject of different sources of funding for the educational system of the sending country, the findings of Docquier and Rapoport (2007) highlight the importance of public funding as well. According to the authors, brain drain is more likely to have some beneficial effects in the source economy when education in the country is not all privately financed, but at least partly subsidized by public sector. Thus,
combining the findings of Shimada and Docquier & Rapoport, a combination of public and private education suppliers appears to be potentially the most effective when aiming at eliminating the negative effects of emigration on the human capital development of the nationals that stay in the sending country.

2.5.5. Remittances from diasporas
Remittances refer to the money sent by emigrants abroad to their connections in the country of origin and are the aspect of emigration that generally has received the most attention, according to Wescott and Brinkerhoff (2006). There seem to be three stages in the consumption of the received remittances in the home country: ‘family maintenance and housing improvements, conspicuous consumption, and productive activities’ (Nyberg Sorensen et al., 2002). Remittances from the migrants in the OECD countries totalled $232 billions in 2005 (OECD, 2007).

There is mild divergence in the stance of the researchers regarding the effects of remittances on poverty reduction in the labour-sending country. OECD (2007) and Campos-Vazquez & Sobarzo (2012) recognize remittances as a major influencer in reducing poverty of individual households, but on the negative side OECD states that they increase inequality. Nyberg Sorensen et al. (2002) support the view of increased inequality. They find that the poorest households do not necessarily have connections to emigrants. Consequently, they do not enjoy the explicit support that remittance-sending emigrant connections could provide.

Even though certain inequality may arise due to some of the households receiving remittances while others do not, there appears to be a possible community-wide multiplier effect for remittances (OECD, 2007). A multiplier effect is visible when a small change in investments or an economic policy generates a greater change in the total output, and the value of the multiplier can be computed in the following way: $1/(1\cdotMPC)$, where MPC stands for ‘marginal propensity to consume’ (Hall and Lieberman, 2007). Still, it should be considered that the multiplier effect only applies in short run.

Who, then, are the emigrants that have the clearest tendency to send remittances to their home country? Uprety & Sylwester (2017), as well as Bollard et al. (2009), find a
clear link between a high level of education amongst the emigrants and the amount of remittances they send from the OECD countries where they reside. Bollard et al. examined data of 33,000 migrants in the OECD countries, and substantiated an average increase of $300 in the annual remittances when the emigrant had a university degree. This difference, according to the authors, stems from the typically higher incomes of the highly educated emigrants.

Additionally, Uprety and Sylwester (2017) claim the causality between brain drain and remittances from diaspora to be bidirectional. That is, remittances are also a push factor that can lead to the migration of skilled workers from their country of origin, because the skilled workers become attracted to a higher wage level of another country. Taking into account the possible threats of brain drain to the sending country – at least in short term – the authors conclude that the observed correlation could hinder economic growth in the labour-sending country. On the other hand, one might claim that the availability of information and the general knowledge on the wage levels of different countries is already a factor that encourages migration, without the need of actually receiving remittances from abroad.

Nyberg Sorensen et al. (2002) do not make such a distinct conclusion about the high-skilled and well educated being the most generous remitters, but they found that demographic group to be the one with a clearer tendency to make productive investments with the personal profits they make in the overseas locations, compared to emigrants with less human capital. Productive investments can be more beneficial for the source economy and have a greater multiplier effect in the economy compared to remittances consumed in family maintenance, for example, so it is noteworthy to recognize the emigrant group that most likely makes productive investments.

2.5.6. FDI and DDI to the source economy
Various authors, like Pekkala Kerr et al. (2017), Nyberg Sorensen et al. (2002) and Wescott & Brinkerhoff (2006) highlight the importance of diasporas in the inbound flows of foreign direct investment (FDI) to the labour-sending country. Nyberg Sorensen et al. (2002) address the role of entrepreneurial advisory and mentorship that emigrants
provide to the businesses in their home country, which can be important contributions to the development of individual businesses and the national economy as whole.

Debass and Ardovino (2009) admit that diaspora networks are an important enabler of FDI to their source economy, but also point out that diaspora direct investments (DDI) are an even better accelerator of the home country development for many reasons. One of the underlying reasons is that diaspora investors are not merely moved by a profit interest. This manifests as the investors being more prone to using suppliers from the home country and not trying to prevent knowledge spillovers to the same extent as foreign investors. Furthermore, DDI can help to attract FDI to the country through joint ventures with foreign investors (Debass & Ardovino, 2009).

In addition to increased trade and investment flows, connected emigrants aid technology and knowledge transfers to their home countries, and an especially noticeable outflow of technology and FDI has been identified from the USA to the home countries of the immigrants (Pekkala Kerr et al., 2017). Scientific evidence would be required to make a valid argument why the USA is in such a position, but one may presume it is, to some extent, due to the popularity of the USA amongst relocating economic migrants, and due to the technology and innovation concentrations that reside in the country.

According to Debass and Ardovino (2009), there were more outbound migrants from Ireland in the 19th century than from any other European state. Apparently, Ireland is an example of noticeable economic growth thanks to diasporas and their descendants, who helped to build its economy and modernize the country later on. Asia is where diasporas and returning migrants most create economic development currently, which is at least partially due to successful policy-making in some countries (Wescott & Brinkerhoff, 2006).
2.6. Conceptual framework and conclusions

Figure 2 illustrates the conceptual framework used in the literature review and concludes the way the different components of the subject link together. As the chart shows, the driving force of migration are the prevailing differences that exist in labour productivity and wage levels across the world. This means that there may be regions or countries where either the overall wage level or an industry-specific wage level is higher than in other regions. Acknowledging this phenomenon works as a pull factor for workers in lower wage level regions, giving them an incentive to migrate. This leads to international labour migration of people.

As discussed in the beginning of the literature review section, migration can be categorized to immigration and emigration to look at migration from the perspective of the sending and receiving countries. After this division, both viewpoints were used to discuss the economic costs and benefits that can stem from international migration. For the sake of simplicity, Figure 2 only shows the biggest components of research, leaving out the subsections of the two main parts of the literature review. The most relevant conclusions retrieved from the literature review will be discussed next.

The economic effects of migration are very complex, which is why straightforward conclusions are difficult to make. Still, after a review on the relevant literature, both
theoretical and empirical, it seems that one of the most important things to consider when it comes to migration, is the skill level of the migrants, especially in immigration. The immigration of highly skilled workers will harm the wages of the highly skilled workers in the destination country, and the same pattern applies for low skilled workers. It is also important that the immigrants achieve jobs that correspond to their skill levels, and that immigration does not exceed the demand for labour in the destination country, or otherwise immigration can harm the efficiency of the host economy, leading to a decrease in competitiveness, and increase its social benefit expenditure.

There appear to be many myths regarding immigration and its economic impact. For example, it might be surprising that research suggests that most of the immigrants in the OECD countries come from other OECD countries, and that a considerable portion of immigrants are highly skilled. Also, immigration can have a positive effect on the fiscal state of the receiving country, if immigrants are young, working adults, which is the case for Denmark and the USA, for example. On the other hand, recent immigrants to Europe are more and more inclined to using welfare benefits upon arrival, and whether the expenditure pays back depends on the time period the immigrants will spend in the destination country, and their ability to eventually assimilate out of welfare dependency.

Emigration-wise, one of the most important aspects to consider are effects that diasporas can have on the home economy. Especially countries that struggle with capital and entrepreneurial activity may benefit from diasporas, which can help delivering them to their home countries. It seems that emigration, especially that of highly skilled workers, may harm the home economy, but the negative effects can be a short-term trade off. In the long run, FDI and knowledge transfers to the labour-sending country may increase, which will develop and modernize the country. Remittances – especially when invested productively – with their possible multiplier effect are also an important factor that can accelerate economic development and improve wellbeing.

Emigration of highly skilled workers can act as an inspiration for workers in the home country to also acquire human capital, but this together with a relatively low supply of professionals able to provide the demanded education, can also increase the cost of
education in the labour-sending country. Furthermore, countries in a similar position as Mexico, with a large supply of low-skilled workers and a high demand for it from a neighbouring country, may notice that the possibility to emigrate actually decreases the incentive to obtain education. The low existence and availability of data make the conclusion-making of economic effects from emigration difficult. More research is required in the field of emigration to fully understand its economic consequences.
3. METHODOLOGY
The literature review in this research paper bases its findings and conclusions on secondary sources, finding key points from relevant theoretical and empirical academic sources accessed mostly through Aalto Finna database or Google Scholar. As the OECD member countries are the geographical focus of the research, the OECD database and the different reports published by the organization are some of the most central sources used. The OECD database served as the main source of figures to the calculations that contributed to the discussion of recent migration patterns, which is the part of this paper that also includes primary research.

Some of the empirical research pieces that were used for this research paper, were country-specific cases, whereas some of the sources cover larger geographical regions. This should provide a varied base for finding possible economic costs and benefits that countries may experience due to international migration. This approach also helps to recognize circumstances under which there may be exceptions to the most usual economic effects that stem from migration.

Apart from Figures 1 and 4, and the conceptual framework, the data for the tables and figures were downloaded as Excel files from the OECD database. The data was then examined and reconstructed to a form that could best be used for the making of readable yet informative visuals for this research subject. The numbers in Tables 1 and 2 come from calculations that were derived from the wide amounts of data available in the Excel files provided by OECD.

It was essential for the clarity of the thesis that the revealing of the most recent migration trends was based on a systematic search based on statistical data. The process started with identifying available data in the OECD database and organizing it so that the top records – countries with the highest numbers of sent and received migrants, that is – were detected. The scrutiny of data was relatively straightforward in the sense that after organizing the data to a readable form, the biggest quantities had to be found.
4. DATA ANALYSIS AND DISCUSSION OF MIGRATION TRENDS

4.1. Migration trends in the last decades and drivers of migration

As discussed in the review of relevant literature, the theoretical underlying reason for international migration is the wage differential between regions of the world. In more detail, skill-specific wage level differences between countries are the key pull factor of international migration, and its influence is strongest on migrants emigrating from middle income countries (Westmore, 2014). Additionally, differences between countries in the strictness of business regulations, strength of legal systems, and generosity of government benefits, act as push and pull factors of migration decisions.

The OECD database is a good starting point for finding different migration patterns and the most recent trends in migration. The key statistics on migration flows and stocks offered by OECD provide a rather detailed overview of the most recent cross-border migration flows both inside the OECD and between the area and other countries. It should be taken into consideration that not even all OECD countries have perfect records of their migration flows and stocks, and that the lack of data is especially noticeable for emigration records. The discussion on migration patterns in this section is based on the data available.

After selecting the most relevant statistics from the key data provided by OECD, Table 1 was made to summarize the findings. The left side shows the top ten migrant-sending countries amongst the OECD countries. The numbers in the flow columns present the total migrant flows from time period 2005–2015, and the stocks of immigrants in the right-most column refer to the average stocks of immigrants in those countries during the same time period.
on the side to give a better understanding of why certain countries and what might be the microeconomic incentives for a person to migrate across borders.

4.1.1. Migrant inflows and stocks

Based on Table 1, United States and Germany appear to be the OECD countries that attract the greatest migrant flows and that also have the highest stocks of migrants in absolute terms. Interestingly, Spain has attracted quite a lot of migrants and comes

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<th>Emigration (top sending countries)</th>
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Table 1: Top 10 migrant sending and receiving OECD countries and the highest stocks of immigrants, 2005-2015 (Source: www.oecd.org)

The reason for looking at aggregate numbers and using average values is that it gives a more accurate picture of migration flows and immigration stocks in the last two decades, instead of taking the data from one year only and drawing conclusions from that, which could be misleading. The following subsections will discuss migration trends in more detail from the perspective of inbound flows, outbound flows and migrant stocks. Some of the possible driving forces that give an incentive to migrate are discussed on the side to give a better understanding of why certain countries appear in Table 1, and what might be the microeconomic incentives for a person to migrate across borders.
third in the immigrant flow list but is ranked only sixth in the list of immigrant stocks. The same holds true for Italy, for example, and might reveal something about those economies. On the other hand, it must be taken into account that there may have been noticeable increases in the immigrant stocks of some countries before the time frame applied here. That may have affected the relatively high rankings of countries like France, Canada, Australia and Switzerland, in the list, leaving countries with bigger immigration flows in 2005–2015 behind them in the immigrant stock ranking.

Considering that the time period in question includes the financial crisis of 2007 and the following recession, seeing how the economic downturn affected the immigration inflows of the top three countries can be interesting. The data in Figure 3 was picked from the OECD database, and it demonstrates the fluctuations in the annual immigration flows of the United States, Germany and Spain, in 2005–2015.

Figure 3 shows a decline in immigration flows for both United States and Spain, but not for Germany. The financial crisis seems to have hit Spain the hardest, at least in terms of its attractiveness to foreigners as a place to live in, whereas for Germany the slope is on a constant growth. What could be behind this? One key reason could be the employment rate. That is, what percentage of the working aged population are employed. Germany was 2.6% above the OECD average employment rate in 2007, and the difference had grown to be 7.9% in 2011 (OECD, 2018a).
Figure 3: Annual migrant inflows 2005-2015 for US, Germany and Spain (Source: www.oecd.org)

The underlying reasons for the growth rate at which the German employment has been growing even from 2007 onwards are beyond the scope of this paper. What matters in the examination of migration patterns is the fact that the employment rate in Germany has been better than the OECD average, and that this may well have been one of the main reasons why migrants have been constantly more and more attracted to Germany as a new location in the time frame 2005–2015. The US employment rates – even though higher than those of Germany before the 2007 financial crisis – plummeted after 2007 (OECD, 2018a), which may be the reason the US immigration flows have been relatively flat since that year.

It should be noted that the expansion of the EU has had a noticeable impact on migration flows, because one of the fundamental principles of the Treaty on the Functioning of the European Union is the free movement of labour, according to the European Commission. The labour migration effects of the EU expansion are also visible in the OECD, since some of the countries in Europe belong to both of the two institutions, which makes it relevant for this study.
Exact figures on immigration to Ireland were not available for Table 1, but Ireland became an important receiver of migrants due to the EU enlargement on 1st of May 2004, when some of the countries in Eastern Europe became member states of the EU. This has been the most important EU enlargement migration-wise (www.europa.eu), and Ireland was the most popular destination country for the Eastern Europeans due to a relatively low language barrier and a lack of restrictions (OECD, 2012 & Barrell et al., 2010).

A measurement that might give a better understanding of how accessible the labour market is in the receiving country, is the difference between the employment rates of the natives and the immigrants, that is $En - Ef$, where $En$ is the employment rate of the native-born, working-age population in a given year, and $Ef$ is the employment rate of the foreign-born, working-age population in the same year. These figures were counted for the OECD countries for years 2012–2016 in Table 2. The countries highlighted with a grey shade show negative values for all the examined years.

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<td>-2.1</td>
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</tbody>
</table>

Table 2: Difference between native-born and foreign-born annual employment rates in OECD countries, 2012-2016 (Source: www.oecd.org)

The bigger the value of $En - Ef$, the higher the employment rate of the native-born relative to that of the foreign-born. Thus, the rows that are interesting in this occasion are those that show constantly negative values, since the negative values indicate that
the foreign-born population actually has a higher employment rate than the native-born population. In the US, foreign-born population has, on average, 2.32% higher employment rate than the native-born population, which may well be one of the characteristics of the US economy that attract immigrants.

Furthermore, since the employment rate is good for foreign-born population relative to that of natives in the US, it may well be one of the reasons the US also has maintained the highest stock of immigrants in 2005–2015. When foreigners achieve jobs relatively easily, they may get settled in the US and not feel an urge to move away, which would happen more likely if they did not achieve jobs and integrate to the society in their new host country.

Possibly one of the most significant factors affecting the average immigrant stock figure of the US is the flows of Mexicans to the country, the significance of which will be proved in the following section, 4.1.2. The most common push factor for the Mexican youth immigrating to the USA is the lack of employment opportunities in their own country (Tucker et al., 2012). A pull factor affecting the decision to migrate is the significantly higher wage level that prevails in the US, compared to Mexico, which only supports the theoretical basic model of migration discussed in the literature review.

Even though Luxembourg, Hungary and Israel have very low values in Table 2 – which, again, indicates that immigrants in those countries are widely employed relative to the natives – these countries may have certain characteristics to them that make them less attractive to migrants, compared to the US for example. First of all, language barriers may exist for some of the otherwise potential labour migrants. Secondly, Israel and Hungary fall behind the OECD average GDP constantly in a time period of 2000–2016 (OECD, 2018b), which can reflect to the overall quality of living standards in the two countries. Luxembourg, on the contrary, has very high GDP figures, but as it is one of the smallest countries in Europe, it is not able to absorb a great number of migrants, in absolute terms.

The US economy, population and geographical area are enormously bigger than those of Luxembourg and many other countries. Thus, the size of the US allows it to have greater immigrant flows, and also presumably applies to the other countries present in
the top migrant-receiving column of Table 1. This is acceptable for the data and analysis needed for this paper, since the absolute numbers are more essential than the relative numbers of migrant flows and stocks, when searching for migration trends.

Even though absolute terms are key in the examination of migration patterns, Appendix 2 shows the value of total immigrant inflows per capita in 2005-2015. The figures for the population averages for the time period are retrieved from the OECD database. The countries with the highest number of immigrant inflows are marked with a deeper blue than those countries with lower relative inflows of migrants. Thus, looking at the color codes, it seems that the US has, indeed, very little immigrant inflows relative to its population, which supports the assumption that the size of the country relative to other countries in the list, allows for greater immigrant flows.

There are four Anglo-Saxon countries that host two thirds of all the highly skilled immigrants in the OECD countries (Pekkala Kerr et al., 2017), and that appear among the top seven host countries of immigration stocks in Table 1: the US, the UK, Canada, and Australia. Furthermore, the authors found that the biggest cities in those countries draw most of the high-skilled immigrants. In the UK, London is a locus for skilled immigrants, whereas in the US similar concentrations can be found in Boston, New York, Seattle, and Chicago, for example. This can be due to a better supply of jobs that match the skill level of the immigrants with lots of education and human capital, as many larger firms have their headquarters in big cities.

4.1.2. Migrant outflows

When creating a picture of the emigration trends in recent decades, it must be highlighted that surprisingly few countries even amongst the OECD members have trustworthy figures of their outbound migration flows. Thus, Table 1 might be missing some of the most important migrant-sending OECD countries. For example, Poland and Mexico are the most significant OECD members, when looking at migration purely between OECD states, according to OECD International Migration Outlook (2017). Since 2005, the Mexicans and the Polish have been the most active in immigrating to other OECD countries, the Polish leading the record. Still, neither one of the two countries appear in the dataset based on which Table 1 was constructed, so there are clearly some gaps in the information availability on emigration records.
One proof of the substantial outflows of migrants from Mexico is Figure 4, which demonstrates that the annual migrant flows from Mexico to just the US fluctuate around 400 thousand people in the time period 1991–2004. This could indicate that if there were exact figures on the outbound migration from Mexico for 2005–2015, the country would possibly rank high in Table 1. Since the time frame in Figure 4 is as long as 13 years, it is safe to presume that similar figures would be seen for the years that follow this time period. And as Figure 4 shows the annual inflows of Mexicans to only one country, it is very likely that the aggregate annual outflows of migrants from Mexico are a lot greater than the numbers seen in the graph.

Figure 4: Annual immigration to the US for selected countries or regions of birth, 1991-2004 (Passel & Suro, 2005)

Tucker et al. (2012) found that especially males immigrated to the US in the hope of gaining financial potential to buy their own house and that way become independent from their families, which is an interesting insight to the microeconomic level of migration decision-making in a specific country. Some expats from Mexico set financial goals they wanted to achieve in the USA, and then return to Mexico. These financial goals are usually means of financing future needs, like education or starting a
business, or supporting the family of the emigrant back in Mexico. The migrants that returned to Mexico with material gains and experiences have had a great influence in the migrating decisions of their peers (ibid).

Besides Mexicans, the Polish were the other nationality found to be highly active in emigrating to other locations from their country of birth in the OECD International Migration Outlook 2017. It appears to be very difficult to find access to exact figures on outbound flows of migrants from Poland, if there even are any, but Eurostat (2017) provides insights on the most usual citizenships of the EU citizens living in an EU country other than their country of origin. The figures provided show that on 1\textsuperscript{st} of January 2016, there were roughly 2.5 million Polish immigrants that had relocated inside the EU.

Out of the EU countries that are also OECD member countries, Poland had the highest stock of emigrants dispersed in other EU countries on 1\textsuperscript{st} of January 2016. Furthermore, in 2011 – seven years after Poland joining the EU – roughly 11% of the Polish were residing in another EU member state (Eurostat, 2011). These findings should support the arguments that the Polish are very active in international migration and their international migration that kicked off after Poland joining the EU is an important migration trend.

In terms of what can be observed in Table 1, Germany ranks highest in how many thousand people have emigrated from the country in 2005–2015. This is particularly interesting, because Germany is also placed high in the inbound migration flow ranking and average immigration stock ranking. One of the reasons for active emigration from Germany can be that the descendants of the immigrants to Germany in earlier decades are now migrating to the countries of origin of their family. Thus, vivid international migration seems to be typical for Germany, although it appears to have higher inflows than outflows of migrants. In other words; There are more foreigners entering the country than there are natives leaving Germany in the 10-year time period of 2005–2015.

It is also interesting to examine the numbers of emigrants in Table 1 and to observe that there is a wide gap between Germany and the holder of the second place, Spain.
Migrant flows from Spain only equal to 48% of the migrant flows from Germany in 2005–2015. Another distinct gap in the total migrant outflows can be detected between the UK, which ranks fifth, and Austria, ranking sixth. The UK had sent 1.985 million emigrants in total, whereas the number of people that emigrated from Austria in the same time frame totaled only 0.736 million. That is, there were 63% less emigrants from Austria than from the UK. Besides these two jumps in the figures, the differences in the emigration section in Table 1 are pretty even.
5. CONCLUSIONS
   5.1. Main findings
As stated in earlier sections of this research piece, the research questions based on which relevant data and studies were found later, were the following:
   1. What are the costs and benefits of immigration for the receiving countries?
   2. What are the costs and benefits of emigration for the sending countries?
   3. Which are the most recent labor migration peaks and trends, and what have been the driving forces behind them?
These questions have been answered to the extent allowed by data availability and accessibility. In this section, the most central findings derived from literature and databases are gathered in order to briefly answer these research questions.

Wage and productivity differentials seem to be the motivator of international migration of labour. On a microeconomic level, possible pull factors of migration vary from higher quality of education and health services in the receiving country and a want to gain financial independence to a skill-specific wage difference between home and host countries. The latter appears to be the most influential driver of migration. Ultimately, the final decision to migrate is made when the perceived utility of migrating is greater than the disutility that stems from the moving process and living in a country other than the home country of the migrant.

In the 21st century, the US has been the most important receiver and stocker of immigrants amongst the OECD countries, which is partly due to the size of the US economy allowing it. The greatest flows of migrants to the US seem to come from Mexico, which is likely one of the biggest migrant-sending economies in the OECD, even though the data provided by the OECD itself lacks data on Mexicans. Poland is another country that has sent high volumes of migrants to other OECD countries since the country joined the EU and gained the right to free movement of labour inside the union. Ireland is an example of the kind of country that in the past was a net sender of migrants, and later gained FDI and DDI thanks to the diasporas. Ireland also became an important receiver of the Eastern European migrants who, like Poland, started to migrate to other OECD countries in masses after having joined the EU.
Germany appears to have high flows of migrants both inbound and outbound, the driving forces of which are difficult to conclude scientifically. The answer may still lie in high employment rates that Germany has maintained even through the economic crisis that kicked off with the financial crisis of 2007. The employment rate comparison across countries also reveals that the US, which has been able to not have just high flows but also stocks of immigrants in the last two decades, actually holds higher employment rates for foreign-born population than for natives, which can be a crucial pull factor for economic migrants from countries where the difficulty of finding employment is likely to be a push factor, as in Spain.

The impact that immigration has on the host economy depends not only on the qualities and the quantity of the entering immigrants, but also on the characteristics of the receiving country economy. For a country with a very developed welfare system, it is important that the immigrants assimilate out of welfare soon after arrival to the country, taken into account that immigrants are found to be more and more inclined to taking advantage of the welfare benefits available in the host country upon their arrival. Thus, it is essential that only such immigrants enter that have skills which the host welfare country labour supply lacks, or it might be harder for the immigrants to find a job and become self-reliant financially.

A crucial finding that appears in the relevant literature, is that immigrants lower the wage level of the host country natives that have closely same skills as the immigrants. The lower wages of one worker group in a country can be beneficial for that part of the economy that pays for their labour, so again, whether this is a negative or a positive effect on the host country economy depends on the viewpoint taken to examine the issue. Still, one judgement can be made on a higher level of scrutiny; It appears to be important that high-skilled immigrants achieve jobs accordingly to their skill level, or else the aggregate efficiency and competitiveness of the host economy decrease, and social expenditure increases.

For the labour-sending countries, it can be very beneficial that there are diaspora networks of the natives outside the borders of the country. This applies especially for countries that lack financial inflows, entrepreneurial activity, or technological knowledge. To start acquiring all those things, diaspora investments and joint ventures
of emigrants can be a valuable starting point to modernize the country and give an incentive for the natives to obtain education and human capital. The exception when diasporas do not encourage their peers in the home country to gain human capital is when there is demand for low skill level workers very near the home country, as the example of the relationship between Mexico and the US showed. Asia is the continent where the positive development effects that stem from diasporas are most visible currently.

Remittances from diasporas are sometimes claimed to be the way how emigration benefits the sending country, but according to the viewed literature, this does not hold true necessarily. The positive effect on the home country economy is minor, if the remitted money is spent on commodities. For remittances to be most beneficial, it would require the money to be invested so that it generates a multiplier effect in the home economy, which is certainly not the case at all times. Additionally, remittances appear to create inequality in the migrant-sending country.

All in all, there are both negative and positive economic effects from international migration, and it depends greatly on the exact countries in question, what the ultimate aggregate effects for the sending and receiving economies will be. The points presented gather the most important and surprising findings that seem applicable to predictions of how migration between certain countries would affect the economy.

5.2. Implications for international business
The recent migration episodes have attracted attention in the media. First of all, the migration crisis that begun in 2015 (www.bbc.com, 2016), has brought new tensions to the European economy. The most common routes of entry to Europe are by crossing the Mediterranean, or by land from the Southeast of Europe. It remains to be discovered how wide the implications of the immigrant masses will be in Europe, but it is likely that, considering the volume of immigrant flows, the supply of workforce will increase and affect the wages of workers of different skill levels, as discussed earlier.

Furthermore, the variety of different languages and cultural backgrounds will possibly change the dynamics of workplaces and bring challenges to business and human resource management. It is also possible that many immigrants will have to acquire
skills by spending on education, in order to be competitive in the developed countries where the supply of highly skilled and trained workforce is quite high. This could signal a market opportunity for educational business.

The ongoing discussion and media attention that the migration crisis has received have already started to generate counter-effects in the political rhetoric, which has begun to show populistic features. Some of the claims heard in the political discussion in migrant-receiving, developed countries, such as the US and some European countries, refer to the outsourcing of some parts of business abroad – which is a form of FDI – or hiring foreign employees, being an act of taking jobs away from the home country natives. It would be crucial to include the efficiency viewpoint and cost management of the home country firms in the discussion, since firms are likely to be interested in those issues.

Restricting the free movement of labour might generate jobs in the home country in short term, but in long term this will decrease the competitiveness of the firms residing in that country. Thus, it is crucial for businesses to be able to be cost effective and have access to less inexpensive labour supply, if there exists such option, or else they will face profitability issues and have to shut down their business or move it to another country. To conclude, it is important to locate entrepreneurial activities in a country where the trade of factors of production, such as labour, is relatively free. This should be considered important in terms of survival in the competitive global business environment that prevails.

With the upcoming execution of Brexit in 2019, there is an interesting opportunity for academic research, if the UK restricts free trade and labour movement between the UK and other countries. This could also have important implications for international business and may raise costs for businesses based in the UK and for businesses based outside the UK that are somehow associated to the UK-based businesses or governmental organs, for example. Since the UK also holds quite large stocks of immigrants and is among the OECD countries that receive most immigrant flows, the immigrants to the UK will probably face barriers of entry to the country, especially if they have entrepreneurial or other business-related intentions.
5.3. Limitations and suggestions for further research

As discussed in earlier parts of this research piece, there is a major gap in research between immigration and emigration, both from empirical research viewpoint and from the viewpoint of record-keeping of migration flows. Thus, better records of emigration are needed to improve the knowledge of the economic effects caused by emigration. Since migration is a relatively new area of economics, the gap in source quantities is not a surprising issue to face. On the other hand, means of monitoring emigration and obligating countries to keep emigrant records can be challenging tasks, so it would possibly require new legislation and a common effort to improve the information gap.

The examination of migration patterns in this paper had a primary research piece to it, as public data was used for calculations that helped to form tables and graphics. Still, this research paper also relies on secondary sources quite a lot, and it is important to acknowledge the need for primary research in the field of international migration, since it is the most accurate way of finding results without having the simplifications and assumptions of other researchers accumulate in a secondary research piece. It is also noteworthy that it would require specific mathematical methods to quantitatively evaluate economic effects of migration and calculate the aggregate effects to better judge whether migration has more of negative or positive effects in an economy.
REFERENCES


Eurostat (2017) *Number of EU citizens that are usual residents in the rest of the EU as of 1 January 2016, EU-28 (million).*


**APPENDICES**

<table>
<thead>
<tr>
<th>OECD member countries</th>
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<td><strong>Country</strong></td>
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Appendix 1: List of OECD countries as of 15-Mar-2018
## Immigration (2005-2015)

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<tr>
<th>Top receivers (absolute terms)</th>
<th>Inflow per capita</th>
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<tr>
<td>Australia</td>
<td>0.0105</td>
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</tbody>
</table>

Appendix 2: Total inflows of migrants per capita to selected OECD countries (2005-2015)