

Academic year 2015-2016



















Erasmus Mundus Joint Master Degree in Economics of Globalisation and European Integration

What is the rationale behind immigration policies? Do developed countries really want to restrict immigration?

Master dissertation

Student Aldar Tsybyktarov

Home institution Vysoká škola ekonomická v Praze

Supervisor prof. Hubert Jayet

Submission date January 2017

Declaration
I hereby declare that I am the sole author of this dissertation and that all citations are quoted.
I authorize the University of Economics, Prague to lend and reproduce this dissertation to other institutions or individuals for the purpose of scholarly research.
Prague, January 2017

Acknowledgments
I would like to thank my dissertation supervisor, prof. Hubert Jayet for his insightful consultations and diligence, the course director doc. Anna Klosová CSc. for her caring support of all EGEI students and lastly the academic staff who were involved with the global coordination of this course.
I take this opportunity to express gratitude to my family for their loving support throughout the course of my studies.

CONTENTS

INTRO	DDUCTION	1
1. IN	MIGRATION POLICY IN SELECTED OECD COUNTRIES	3
1.1.	THE EUROPEAN FRAMEWORK	5
1.2.	INTRA-EU MIGRATION AND THE UK CASE	7
1.3.	GERMANY	8
1.4.	THE CZECH REPUBLIC	9
1.5.	THE UNITED STATES OF AMERICA	10
2. TI	HE EFFECTS OF IMMIGRATION ON DEVELOPED COUNTRIES	12
2.1.	DEMOGRAPHIC EFFECTS	12
2.2.	LABOR MARKET EFFECTS	14
2.3.	FISCAL EFFECTS	24
3. PO	OLITICAL ECONOMY AND PUBLIC OPINION	29
3.1.	GERMANY	33
3.2.	THE CZECH REPUBLIC	34
3.3.	THE UNITED STATES OF AMERICA	35
3.4.	JUSTIFICATION OF PUBLIC OPINION IN FAVOR OF RESTRICTION	35
4. C	ONCLUSION	38
I. R	EFERENCES	40
II.	APPENDIX	44
i.	ABBREVIATIONS	44
ii.	LIST OF FIGURES	44

INTRODUCTION

We live in a world of globalization, a world where there is an increased integration of economic, cultural, political, religious and social systems (Oxford Economics Dictionary 2016). This process of globalization, together with an unequal distribution of scarce resources, leads to an increase in migration. Migrants relocate from developing to developed countries to secure their socioeconomic wellbeing or simply to escape war or persecution of any type. Over centuries history has taught, that migration can have both positive and negative effects on different aspects of our lives. The success of migration largely depends on the immigration policy of the receiving country and on the consequent integration of migrants in their new home-countries and essentially on the reaction of the domestic population. This dissertation will discuss the challenges, threats and opportunities that migration brings to developed OECD countries and how it might impact the migrant's country of origin. The emphasis is on the quantifiable economic outcomes as opposed to social implications.

The first chapter focuses on the migration policies in selected developed OECD countries. Out of the 34 OECD countries, 22 are also member-states of the European Union which means they are part of a common framework which tries to manage migration. For this reason, the development of the European framework will be discussed. The phenomenon of intra-EU migration, meaning the movement of people within EU countries will be presented on the example of the UK. Consequently, the national immigration policies of two EU countries, namely; Germany and the Czech Republic will be introduced. Despite both countries being EU and OECD members, they are different in population, culture and mainly in migration policy. To allow for a balanced perspective, the immigration policy of the United States of America, the biggest recipient of immigrants in absolute number in the world, will contrasted. Arguably, policies are designed to serve as a path which leads towards a set of national immigration goals which can be measured through economic models.

The second chapter will elaborate on the effects of immigration on developed countries, and, among other aspects provide an economic analysis with a strong focus on the fiscal and labor market effects on the receiving country.

The dissertation synthesizes existing quantitative analyses to assess the benefits or losses of migration on the receiving country. The third chapter contrasts this data with the public opinion on the topic of migration in the receiving country. Evidence of the relation between political preference and pressure on one hand and economic outcomes of immigration policy on the other, are assessed.

The political economy will then attempt to answer the question, whether a restrictive immigration policy is economically rational, or if it is the result of socio-political pressures from within the society. This will be the fourth and conclusive chapter of this dissertation.

1. IMMIGRATION POLICY IN SELECTED OECD COUNTRIES

The immigration policy of a country, by definition, deals with the transit of people across its borders into the country. It especially concerns those who intend to work or stay in the country. For a policy to bring the intended benefits, it must be linked to other national policies and laws already in force but also define the type of people which the country wants to, or needs to admit. When immigrants arrive in the host country, the policy sets rules about employment, education, access to welfare, social and health services but also provides a framework for integration.

The dissertation introduces the European Framework for Migration which, to a certain extent, regulates the sovereign immigration policies of member states towards third country nationals. It is also important not to neglect intra-EU migration flows which are mainly driven by migrants from Eastern and Central European; especially Bulgaria, Poland or Romania who wish to resettle in a more economically prosperous country such as the United Kingdom (Ruhs 2016). The example of the UK and its intra-EU migration flows is discussed to illustrate the implications of the free movement of people within EU and their respective employment rights. The UK is also an example of how the intra EU migration can trigger citizens to change their political views towards immigrants based on assumptions that they will negatively affect the socioeconomic welfare of the domestic population.

The chapter discusses the national immigration policies of three OECD countries, two of which are member-states of the European Union which has a framework for coordinating the sovereign immigration policies of member states. The third discussed country is the USA. The EU includes 22 OECD countries and the region receives well over three million (Eurostat 2016) migrants from third countries each year – for this reason the development of EU Immigration Policy and the Framework which applies to member-states will be discussed in greater detail.

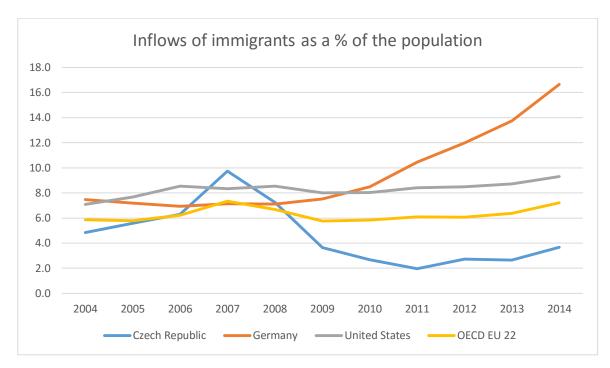


Figure 1 - Inflow of immigrants as a percentage of the population of the host country 2004 – 2014. Author's elaboration. (Data: OECD 2016)

The graph above shows the inflow of immigrants into a country or region expressed as a percentage of the population of the receiving country. The calculation is as follows:

Annual inflow of immigrants = $(Absolute\ number\ of\ immigrants\ /\ absolute\ population)*1000$

The orange line "OECD EU 22" shows the aggregated number of immigrants coming into the 22 OECD countries in the EU as fraction of the total population of these 22 countries. The graph clearly shows, that Germany receives more immigrants than the OECD EU average – in fact, in 2014 Germany received double the OECD EU average. The values for Czech Republic reflect the restrictive immigration policy, with the exception of the years 2006 – 2008 when the country had unprecedented economic growth which attracted a massive influx of labor. It is interesting to note that United States follow a very similar trend as the EU OECD average, but accept a higher amount of immigrants proportionate to the population.

1.1. THE EUROPEAN FRAMEWORK

The European Union is one of the most popular regions for migrants in the past several decades. The net inflow of migrants to the EU has grown significantly. In 1998 there were 0,5 million migrants entering the EU, in 2003 approximately 2 million, and after 2005 the net inflow stabilized at 1,6 million incoming migrants each year (Guardia, Pichelmann 2006). New statistics confirm that this stabilization did indeed occur as the immigration to the EU-28 from non-member countries was 1.7 million in the year 2013 (Eurostat 2016).



Figure 2 - Migration to and from Europe. (Data: Abel, Sander 2014)

The above visualization shows migration from different regions of the world to Europe. The colored segment of the perimeter depicts the population of the region relative to the population of the world. The thickness of the lines is proportionate to the percentage of the population of the

given region (Abel, Sander 2014). The visualization shows that Europe is a very popular destination which welcomes migrants from all over the world. We also learn that migration within the EU accounts for approximately 35% (Eurostat 2016) of the total migration which happens in the EU.

The spotlight of this dissertation are the migration policies and the rationale behind them. The situation of the EU policies is specific and can be best described by; "Within the EU, each Member State sets its own National Immigration Policy. However, EU leaders have recognized that dealing with immigration is a common priority and that their countries face similar challenges. They have therefore decided to coordinate important aspects of immigration policy" (European Commission 2015). The next few paragraphs will be dedicated to the development of migration policies in Europe, the current programs and how they are enforced.

In 1993, when the EU was officially established, the Schengen area of free movement had 7 Member Countries, one of these was Germany. The Czech Republic joined the Schengen area in 2007. In 2014 the European Council defined strategic guidelines, the so called "Ypres Guidelines", for the period 2015 – 2020. The document identified 33 strategic points in four categories. The first category is "Freedom, Security and Justice", this contains 13 points 5 of which are directly concerned with migration policy. The relevant guidelines are as follows (Council of the European Union 2014):

- Consistently transpose, effectively implement and consolidate the legal instruments and policy measures in place.
- Europe must develop strategies to maximize the opportunities of legal migration through coherent and efficient rules to remain an attractive destination for talents and skills.
- The full transposition and effective implement the Common European Asylum System (CEAS).
- Tackle irregular migration resolutely
- Efficiently manage external borders of the European Union.

These elate goals set out by the EU are applicable to all member states, including Germany and the Czech Republic. which must adapt their immigration policies to be in accordance with these guidelines.

Having introduced the development of the European Migration Policies it is also important to briefly introduce collective institutions which enforce these policies. Currently, one of the significant institutions is the Frontex and recently proposed European Border and Coast Guard is likely to be formed in the near future. These institutions protect land, sea and air borders with collective patrols and shared information.

1.2. INTRA-EU MIGRATION AND THE UK CASE

Before discussing the migration policies of selected OECD countries which are mainly focused on controlling migration from third countries (Koslowski 1994), it is necessary to introduce the phenomenon of intra-EU migration, where EU citizens can practice the right of free movement across the union. The stock of potential intra-EU migrants is increasing as more members join the EU. Most notably in 2004 when 8 countries (so called "A8") joined the EU. These countries included Latvia, Lithuania, Poland, Slovakia and the Czech Republic. In 2007, Bulgaria and Romania joined the EU as well. The accession of these countries which generally have a GDP lower than the EU average triggered intra-EU migration. All pre-2004 EU states decided to exercise the right to temporarily restrict access to their labor market from EU citizens from the new member states – with the exception of the UK, Ireland and Sweden. Pre-2004 EU countries did not want to destabilize their job markets or to create a shock, however the 3 countries which didn't restrict access to their labor market had high demands for labor and immigrants from the new EU member states could solve this issue. Logically, UK, Ireland and Sweden immediately became a popular destination for many EU migrants due to the attractive labor market situation and high wages. In Q1 2016 there were over 2.2 million (ONS 2016) non-UK EU citizens working in the United Kingdom. There has been a lively discussion about the economic outcomes of labor market migration in the UK. The studies of Dustmann examine the fiscal consequences of intra-EU migration to the UK from the "A8", or, in other words, the citizens of countries which joined the EU in 2004. The results show that these immigrants are 59% less likely to receive state benefits or tax credits when compared to the native UK population (Dustmann 2009). Furthermore, the "A8" immigrants are also 57% less likely than natives to live in social housing (Dustmann 2009). Also, the "A8" workers in the UK have a larger labor market participation rate, which means that they are more likely to be employed than the native population which results in a higher indirect tax

contribution. The OLS model has proved that A8 immigrants make a positive net fiscal contribution to the public finance of the United Kingdom (Ruhs 2010). The results of Dustamnn's studies were confirmed by a more specific study from Burrel on Polish immigrants (who are included in the "A8") in the UK and their labor market participation and fiscal effects which they trigger. Poles have proved to produce a positive net fiscal contribution and have a lower unemployment rate than the domestic population (Burrel 2009).

Despite clear empirical evidence that intra-EU migration to the UK is economically prosperous from a labor market and fiscal perspective, it seems that the native population of the UK was not very pleased with such an influx of migrants following the 2004 EU enlargement. When Bulgaria and Romania joined the EU in 2007 the UK government used the right to restrict access to the labor market to citizens of those two countries for a period of 7 years (Ruhs 2010). This can be seen as evidence that the attitude towards migrants has become increasingly negative and there was sociopolitical pressure to implement a more restrictive policy (Vargas-Silva 2016). The impacts which immigration has on public opinion in developed OECD countries will be assessed in greater detail in the third chapter of this dissertation.

1.3. GERMANY

In the year 2000, the German government realized that they have a severe shortage of highly-skilled IT professionals, so they designed a program of "Green Cards" with the vision to admit twenty thousand skilled workers. The demand was much lower than the government expected, only 17 thousand applications were received. The offered incentives weren't attractive to the skilled migrants and thus Germany lost the competition with UK, USA and Australia – three developed countries which were more successful in attracting skilled migrants to work in the IT sector (Constant 2011). It was only in 2005 when the German government made a declaration admitting that they are an immigration country. The visa requirements were relaxed, and German companies were offered incentives from the state if they would hire foreigners provided that there is no suitable German citizen to fill the position. The German economy, heavily reliant on industry, pushed down long-term unemployment levels and boosted the demand for both unskilled and skilled labor which caused thousands of companies to use the governmental incentive programs to attract foreign

workforce (Constant 2011). The German government also created programs for attracting foreigners to study at German universities – graduates of top universities could have their residency permit extended for one or two years to give them enough time to find suitable employment in Germany.

Today, Germany is the top migration destination right after the United States by incoming migrants (Bloomberg 2014). The country adapted a rather open immigration policy so that it could attract highly skilled professionals and scientists which the government has identified as a priority group which can boost the economic growth. Germany currently has a foreign born population of 12.8%, which puts the country in the Top 5 of EU countries with largest foreign-born population and well above the EU average which is at 9.4% (Eurostat 2016).

1.4. THE CZECH REPUBLIC

The immigration policy in the Czech Republic can be considered as fairly restrictive, both historically and still today (Stojarova 2004). After 1996 the Czech industry was booming as the country was on a path to join the European Union – to match the conditions for entry, the immigration laws had to be relaxed. From the year 2000, foreigners permanently living in the Czech Republic for at least 10 years could exercise the right to apply for Czech citizenship. In 2004 when the Czech Republic joined the European Union, the immigration policy was relaxed yet a little more so that the country would meet legal requirements of the union. There was an effort to converge and institutionalize policy across EU countries and promote higher intra-EU mobility of people. In the next stage, from 2005 until 2008 the Czech Republic implemented a "neoliberal" policy, granting work visas to non-qualified workers who were needed to support the industrial growth of the country. During this 3-year period, the average annual increase in the number of foreigners was 15% (Czech Ministry of Interior 2016). As the 2008 crisis hit the country, new non-qualified workers were no longer necessary so the government took this opportunity to implement a "neo-restrictive" immigration policy which was the result of increased crime rates within the migrant communities and political pressure from the society (Kusnirakova 2011).

Czech Republic currently has a foreign born population of 4.5% (Czech Ministry of Interior 2016) which is under the EU average of 9.4% (Eurostat 2016). Due to its restrictive immigration policy, difficult language and relatively low salaries, Czech Republic is not a preferred destination for refugees or migrants. In 2012 the Government of the Czech Republic declared that they will promote legal migration through several campaigns which are designed to reflect the development on the labor market and the sovereign interests of the country. The deceleration indicates, that individuals with certain skills and the "capacity to integrate" will be preferred. The most notable campaigns of recent years include; relaxed citizenship requirements for young families worldwide with Czech origin who are invited to permanently migrate to the Czech Republic, or the campaign which is designed to attract skilled Ukrainian labor because of the cultural similarity.

1.5. THE UNITED STATES OF AMERICA

As mentioned, the United States of America accept more immigrants than any other country in the world – immigration has become a way to grow the population. The United States are an attractive destination due to their economic prosperity and high standard of living (Borjas 1996). As of 2013, the USA had a foreign born population of 12.9% (OECD 2016). This is the above the OECD average and even above than Germany.

The largest group of immigrants in the USA, as of 2013, is represented by 11.5 million Mexicans, making up 28% of the whole foreign born population of the country. In the last decade a rising number of Chinese citizens migrated to USA because of environmental reasons – to escape the smog and pollution in China. The Chinese are represented by 2.4 million and the third largest group are Indians accounting for 2.0 million of the American population (OECD 2016).

It is important to note that the USA does not have a strong enforcement agency, such as Frontex in Europe, which would fight or control illegal migration. This triggers inflows of illegal immigrants who are not accounted for in statistics and often do not face repression (Alesina 2001). Many of these immigrants are from Mexico which is geographically close and shares a long land-border with USA. The lack of an enforcement may be one of the causes for increased socio-political

tension when it comes to illegal migration discussion in the USA. It is estimated that there are over 11 million illegal immigrants in the USA (Joppke 2009).

The United States use a system of green cards to admit people who match the needs of the job market and an overwhelming number of economist's view this very positively; including work from the 20th century (Borjas 1994) and recent influential papers (Joppke 2009). Case studies from USA will be discussed when assessing the labor market and fiscal effects of migration in the next chapter. Consequently, these effects will be contrasted with public opinion on immigration in the USA.

2. THE EFFECTS OF IMMIGRATION ON DEVELOPED COUNTRIES

The effects of immigration on developed OECD countries are known to be positive and negative – sometimes depending on the country examined, or on the specific policy in question.

Apart from important demographic effects that immigration has on the receiving country, economists often examine labor market and fiscal effects of immigration in their research papers. However, the scope of influence which migration has on a country, is, in fact, much wider. Immigration can effect technological progress and innovation, inflation, the housing situation in a country, the society and alter the crime rates within a country.

2.1. DEMOGRAPHIC EFFECTS

Developed countries are ageing and the governments are under pressure to ensure the continuation of its country; both socio-demographically but also economically. There are only two ways how to deal with this problem. The first is increasing the fertility rate (number of children per one woman) and the second is through immigration – attracting not only younger people, but also those who will have higher fertility rates. It seems the first approach is not working out, as the fertility rate is below two for all three countries in scope and for the EU 28 average.

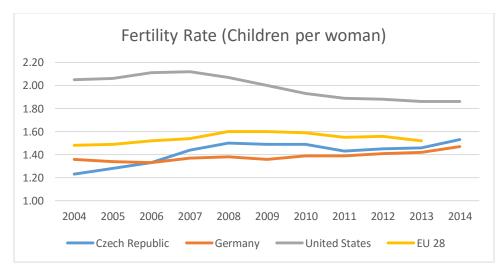


Figure 3 - Fertility Rate in Selected Developed Countries. Author's elaboration. (Data: OECD 2016)

The above graph shows the development of the fertility rate in 2004 – 2014 (data for EU in 2014 is not available). Since the value of fertility is currently below two for all three countries in scope, it is clear that the population is dying out as there isn't even enough children to replace the parents. It is interesting to note, that Germany and the Czech Republic have an increase in the fertility rate in the years 2013 – 2014. This increase is driven by immigrant families who came to the two countries between 2005 and 2008 when the economy was booming and decided to stay in the country and have their offspring there. Though the small increase in the fertility is good news, it is still not enough to sustain the population. Statistics show us, that the last time Germans could sustain their own population, meaning have a fertility rate of two or higher was in the year 1933 (OECD 2016).

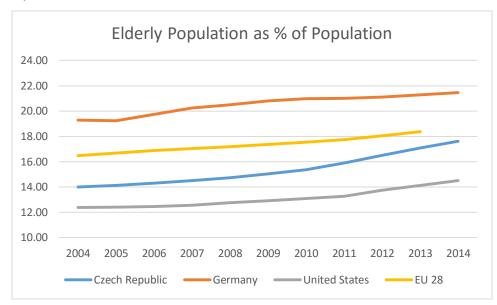


Figure 4 - Elderly population above 65 years as a % of the population of the country. Authors elaboration. (Data: OECD 2016)

The above graph shows the elderly people (above 65) as a percentage of the total population of the three countries. We can see that there is steady growth of this age group in all three OECD countries and on average in the EU. From an economic perspective, it is necessary to sustain an economically active population which can uphold the pension system. This allows older citizens to receive state-funded pensions, but also the labor market must be supplied with a sufficient number of workers who can support the economic growth. The sustainability of a state pension system based on young immigrants to uphold it is an aspect of political economy which can be a determinant of the public opinion towards migration in developed countries.

2.2. LABOR MARKET EFFECTS

The numerous critics of an unrestricted migration policy have been claiming for decades that migrants have a negative impact on the labor market of the receiving economy, specifically they cause negative employment and wage effects. To assess whether this claim is true, the work of Borjas (1995) will be leveraged as a comprehensive foundation to introduce the economic modeling approach to quantifying the labor market effects of immigration. The analysis assumes a market-clearing framework where factors of production, such as labor, can move freely from one country to another and thus create efficiency and increase total welfare. We assume that a production function of a country has two inputs; 1) capital and 2) labor which is composed of native and immigrant workers. Further assumptions of the model are that all workers are perfect substitutes, all capital is owned by natives and finally that the supply of both production inputs is perfectly inelastic.

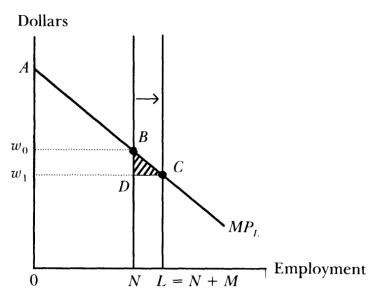


Figure 5 - The Immigration Surplus (Borjas 1994)

The figure above shows an equilibrium of the labor market, where the area under the marginal product of labor curve (MP_L) is the economies total output. Before immigrants enter the country, the income to natives is denoted by ABNO. After migrants enter the country, the supply curve will shift creating a drop in wages (from w_0 to w_1) and the national income is now denoted by the shape ACLO. Clearly, a part of the increased income now goes to the immigrants supplying their labor. However, there is also an increase in the income of the natives due to the increased output, this is

called the "immigration surplus" and it is denoted by the area BCD on the graph. The surplus is created because each migrant will increase the national income by a value which is higher than the cost of employing this migrant. Although natives might receive a lower wage due to migrants, these losses are offset by increased income to capitalists by means of higher rental prices of capital.

Based on the model described above, Borjas claims that the objective of an immigration policy is not only to increase national income accruing to the natives but also to achieve significant redistributive effects. These effects can have an even larger magnitude than labor market effects as they imply notable movement of wealth from (migrant) workers to (domestic) owners of capital in the form of increased rent payments (Borjas 1996). This notion is challenged by Peri who warns that even though the overall national income is likely to increase following immigration, some groups will suffer (Peri 2014). Specifically, the low-skilled natives who will compete for jobs with immigrants are likely to see their wages drop from w_0 to w_1 . This is likely to influence public opinion on immigration – this aspect will be discussed in the third chapter of this dissertation.

To further study the effects of immigration on skilled and unskilled workers, the studies of Dustmann which are an expansion of the previously introduced market-clearing theory of Borjas will be leveraged¹. We assume that immigrants and natives within the skill group are perfect substitutes and that firms acquire capital at fixed interest rates, implying the existence of an international market.

If an economy experiences immigration, it is likely that the influx will consist of either skilled, unskilled or both types of migrants. In the home economy, which welcomes migrants, we expect the existence of an equilibrium between skilled and unskilled workers. Naturally, the immigration flow is likely to disturb this equilibrium thus changing the "skill mix" of an economy (Borjas 1995). If we assume that skilled and unskilled workers are at equilibria in terms of quantity and wages, it is likely that a change in wages will occur following a change in the skill mix caused by migration to the economy.

¹ DUSTMANN, Christian. GLITZ, Albert. FRATTINI, Tommaso. 2008. The Labor Market Impact of Migration, pp. 9

For instance, if all incoming migrants will be unskilled then a disequilibrium on the labor market is bound to happen which will result in an over-supply of unskilled labor. The absorption of these migrant workers will trigger changes to the levels of employment and to the wages, effecting both the skilled and unskilled. If we assume that an economy has only one sector, then there will be a direct change to the wages. If, however, the economy is more complex and consists of multiple sectors then migration is likely to trigger a change in wages but also in the structure of output across the concerned sectors. The following paragraphs will introduce the effects of migration on the labor market of a developed country. Firstly, a simplified model which assumes only one output will be discussed. Consequently, the effects of migration on a multi-sector economy will be investigated – this scenario better describes a developed OECD country, however it is more complex.

In the case of a one sector economy, we will assume that only one type of good is produced (Dustmann 2008). As mentioned in the previous paragraph, a constant interest rate set by global markets will be assumed which means that the supply of capital will be elastic. This will then leave us with three factors of production, namely: capital, skilled labor and unskilled labor. The labor, in our case, will be completely inelastic, causing the workers to supply their labor for any remuneration offered. Though this assumption may sound extreme, it does not have to be so far from reality, especially in the case of unskilled migrant workers who are often willing to work for very low wages (Peri 2014). To test the effects of migration on the labor market we will also assume that the structure (proportion of skilled against unskilled) of migrants is different to the home economy. In this case, we will assume that all incoming migrants happen to be unskilled which will dramatically increase the supply of the unskilled work-force in the economy. The obvious result of this is such, that the imaginary aggregated "remuneration spend" on unskilled labor can now be split between a larger stock of workers. This will, of course, lead to a decrease in wages of the unskilled workers (Borjas 1995). Since firms can now pay the unskilled workers less than before, it is likely that there will be an increased demand for this group of workers. This will happen until the point when all of them find employment. Of course, they will be working at a lower wage than before the immigration started – both the domestic and the foreign unskilled workers.

In this simple model, the result is that immigration of unskilled labor will certainly harm domestic unskilled workers as their wages will be reduced. However, this result is preliminary because we cannot forget that the one-sector economy utilizes skilled labor as well as unskilled. Since we need both types of labor to produce a good, and we experienced an increased supply only in unskilled, it is no surprise that the skilled labor will become more scarce and more demanded than before the immigration started. The influx of unskilled labor will drive the growth of the wages of skilled labor which will exceed the decrease in wages of the unskilled (Ottaviano 2012). The reason for this is simple, if we have an increase supply of one factor, we are likely to increase production which will cause a proportionate increased demand for the other factor, which is, in this case skilled labor. Under the assumption that skilled labor receives a higher nominal wage than unskilled, which happens to be the case in all developed countries, then we will see an increase in welfare because the aggregated increase in wages of the skilled will be higher than the aggregated decrease of the wages of the unskilled.

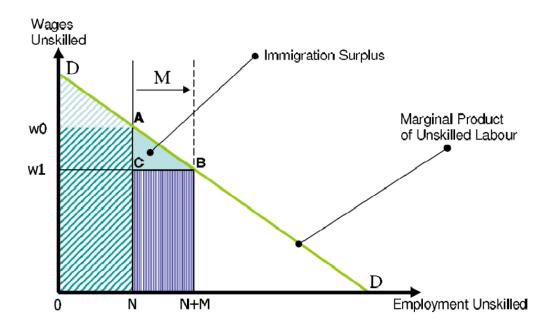


Figure 6 - Labor Market Effects: Unskilled labor (Dustmann 2008)

We can demonstrate this graphically for unskilled labor. The Y axis indicates the wages of the unskilled and the X axis their level of employment. Before migration started, we had the native population (N), working for wage w0 and an equilibrium at A. Following the migration, the stock of unskilled workers increased by M, driving the employment level up to point N+M on the X axis. Since all of the migrants were unskilled, the supply of skilled workers remained constant and that

resulted in a decrease of wages of the unskilled to level w1, creating a new equilibrium at point B. Two important areas in the graph must be noted: firstly, area w0-A-C-w1 which represents the decrease of the output share of unskilled workers and secondly area A-B-C which represents an additional surplus which was created by more people working for less money. Both of these areas will now create an increased output for the skilled workers, creating very favorable conditions for them.

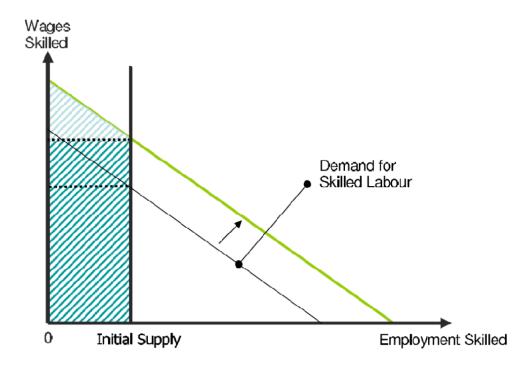


Figure 7 - Labor Market Effects: Demand for skilled labor (Dustmann 2008)

The above graph shows that the demand for skilled labor, caused by migration of unskilled will increase triggering an increase in wages. We witness redistribution, but also an aggregate increase of output caused by new factors entering the economy.

To summarize, a different structure of skills of migrants will have a positive impact on the home economy, causing the decrease of wages of one group but a larger increase of wages of the other group. This could lead us to the simple conclusion, that migration is prosperous for the economy, however that is valid only under the assumption that capital supply is elastic. If it wouldn't be elastic, then the capital owners are likely to want a part of the surplus which is caused by migrants

and that would lead to a decrease of the average increase of wages. The extent of the decrease would determine whether migration would have positive or negative effects.

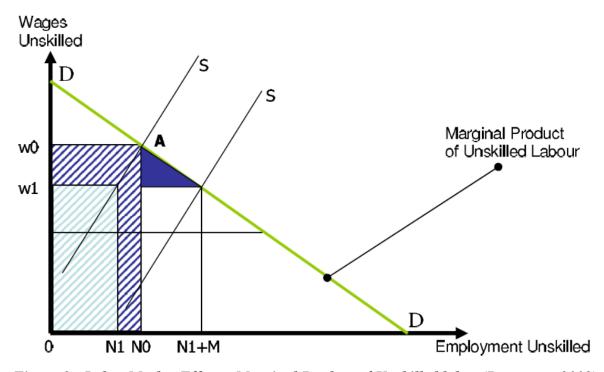


Figure 8 - Labor Market Effects: Marginal Product of Unskilled labor (Dustmann 2008)

In the previous paragraphs we assumed that unskilled immigrant workers will work at any wage, unfortunately, this scenario may be the reality in some countries, but for the sake of this economic analysis, let's assume it is not so. If the supply of labor is at least a little elastic, we will have the situation when some people will refuse to work at a lower wage and instead be unemployed – perhaps relying on welfare. The choice to be unemployed will cause a change of equilibrium. In the above graph, the labor supply is "S". As the migrants "M" come into the picture, the supply of unskilled workers will drive down wages, and increase the amount of unskilled employed on an aggregate level. However, a certain proportion of the native unskilled workers, won't accept the lower wage, and thus they will choose to be unemployed – this group is represented by N1-N0 on the graph.

The models described are valid if the migrants change the structure of the domestic workforce (Ottaviano 2012). From a practical perspective, developed OECD countries are aware whether they

require more skilled or unskilled labor so their migration policy will attempt to attract the desired group. In any case a change of the stock of workers will always lead to one group losing by having lower wages (the group which is in excess supply after migration), and the other group will be enjoying higher wages (the one which is more scarce after migration) with the aggregate welfare increasing for the whole economy. If the skilled/unskilled division of migrants is in the same ratio as in the economy where they are migrating to, the described models will not hold and thus we can expect no changes to wages or welfare.

Having described a simplified situation where the economy has only one sector and can react to changes in the supply of labor types only by alterations to wages, it is now time to introduce what would happen if the economy would have multiple sectors. We will assume that there are two sectors in the economy. One sector produces a good which is intensive in unskilled labor, the other sector produces a good which is intensive in skilled labor. Again, we will assume that the supply of labor will be inelastic meaning that anyone will work for any wage, regardless of how low it is and that output produce can be traded on global markets. Under the condition of a fixed proportion of output good between the sectors, in the case of an influx of unskilled labor, as in the previous one-sector example, the migrants would force the wages of unskilled workers down and at the same time increase the wages of skilled workers. However, in this case, the reduced price of unskilled labor will increase the profit of the industry which produces a good which is unskilled-labor intensive and naturally the production of that industry will experience growth. This increased demand for unskilled labor will push the wages up again causing them to return to the original, premigration values where they will settle in the original equilibrium thus compensating the wagereducing shock in the short-run by wage growth in the long-run. This implies that immigration does not change the wage (because it will decrease and then increase), but instead it will change the structure of the economy causing it to specialize in the unskilled labor-intensive industries, or the skilled-labor intensive industries depending on the skillset of migrants which enter the country. This change of output mix without a change of wages is described by the Ribczynsky theorem based upon the 2 goods, 2 factors model (Krugman 2007). In the situation when the domestic supply is at least a little bit elastic, meaning that some people would refuse to work for a lower wage, we would then see a small proportion of voluntarily unemployed people who would wait

until the sector-structure of the economy would adjust and wages would go up again before they would start delivering their labor (Leamer, Levinsohn 1995).

The immigration policy in Germany is heavily influenced by something which is hard to measure – and that is the labor shortage (Zimmermanm et al. 2007). Data about the labor market in Germany is collected by local and national agencies, which track two aspects. The first being the unemployment rate in regions and the second being the stock of labor, or in other words the labor supply (Parusel, Schneider 2010). The reason why labor shortage is difficult to measure is because an increase in the supply of labor will not necessarily mean that more jobs will be filled. This is caused by a mismatch of skills which the employers require and the skills which the labor supply possesses. Since the demand and supply of labor has a different structure, it is called structural unemployment – an unpleasant situation where there are vacant jobs and there are people looking for jobs but there is no match. It seems that this situation happened in Germany. To understand it better, we will use the Beveridge curve to compare unemployment rates to vacancy rates.

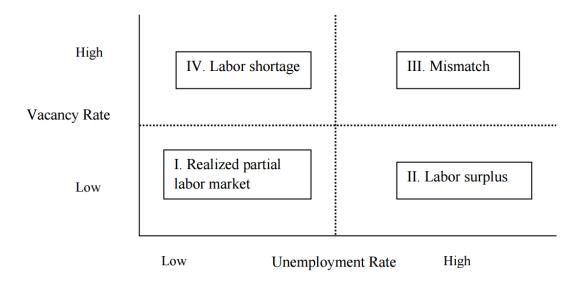


Figure 9 - Beveridge Curve (Zimmermann et al. 2007)

The graph above has four quadrants which are labelled with roman numerals. The "I. Realized Partial Labor Market" area is the ideal situation when the unemployment rate is low and at the same time there are few job vacancies. The "II. Labor Surplus" is a situation where there are few vacancies but a large supply of labor which causes increased unemployment.

In Czech Republic and Germany, the position of the country was in "IV. Labor Shortage". Many jobs are available but few people to fill them. The Beveridge curve very effectively demonstrates the power of immigration policy. Essentially, the government of these countries can decide in which quadrant the job market of the economy will be in the coming years.

- 1. Increase the marginal productivity of the native population so that they do the jobs of other people and drive down the vacancy rate. Though theoretically feasible, such an unprecedented and extreme rise in productive of labor is highly unlikely.
- 2. Identify the right quantity of immigrants possessing the necessary skills which can fill the vacancies but not increase unemployment. This would shift the country to quadrant "I. Realized Partial Labor Market".
- **3.** Accept a large quantity of immigrants, hoping that some will fill the vacancies, but risking that others will not find a job which will lead to an increase in unemployment. This would shift the country to quadrant "II. Labor Surplus".
- **4.** The last scenario is "accept all immigrants, but especially the ones which have the skills we don't need". This would be an example of a fiasco, or a completely failed immigration policy which would lead to people entering the country to be unemployed and essentially decrease welfare for everyone. The country would position itself into the "III. Mismatch" quadrant where there would be many job vacancies and many unemployed applicants which are unsuitable for the jobs offered.

Since Czech Republic's strict immigration policy was introduced in this dissertation, the results of these policies on the labor market will be briefly introduced in light of the previously discussed Beveridge curve. To provide background on the Czech Republic; the country accepted several hundred asylum seekers from Ukraine, Russia Vietnam and several other countries based on international law. However, the majority of migrants, which come in thousands, were economic migrants from the East coming to work.

The country launched two projects to manage the migration and to predict the changes to the "skill mix" on the labor market. These programs were called "Selection of qualified foreign workers" (2003 - 2008) and the "Green Card" (2009 - 2014). They aimed to attract qualified labor to the

Czech Republic. In both projects, the country was attracting workers with a university degree from a technical field to work in the automotive industry on which the Czech economy depends and in the area of R&D. The country does not have enough graduates of technical fields and has a lower nominal wage than many EU countries which makes Czech Republic unattractive for migrants from within the Union. The government successfully targets third-country nationals from Ukraine and Russia who have little cultural differences and thus manage to integrate. The Czech Republic had a large influx of unskilled labor at the beginning of the millennium which pushed the wages of the unskilled down, but at the same time increased wages of the skilled workers.

The government initiatives of the past decade in increasing the stock of skilled labor have an equalizing effect on the economy, creating a slight increase in the wages of the unskilled (Czech Statistical Office 2016). The most recent immigration program of the Czech Republic called "Employee card" started in 2014 and permanently replaced the "Green Card" program. In terms of the Beveridge Curve, the program aims to push the country from "IV Labor Shortage" quadrant to the "I. Realized Partial Labor Market" quadrant by filling vacancies at no increase to the unemployment rate. This is done through the cooperation of employers with the local employment authorities. When a company fails to find a Czech or EU candidate for a specific position, it can turn to the Employment agency which will assist in finding a potential immigrant abroad who has the required skills. When the employer signs the employment contract with the employee, the government will provide a tax benefit for up-to 2 years and other incentives. The immigrant, and his or her family, will be entitled to have the "Employee card" which is provided based on a guaranteed job in the country. The Czech Republic is aware of its labor shortages and demographic issues and as a consequence the government allocated human and financial resources to support this program and process applications in a fast time-frame of a maximum of 60 days.

2.3. FISCAL EFFECTS

To assess **fiscal effects** of migration on an economy, we can choose two main approaches. The first is the static approach which calculates the difference between what a migrant contributed to the state budget through taxes and what he or she received from the state through transfers in a given year. This approach is rather simple and straightforward which can be suitable for examining the immediate fiscal effect of migration for the previous year based on official data. However, it does not take into consideration the changes to the net fiscal contribution which are dependent on the age and employment status of the migrant. The dynamic approach is a second, more complicated way, how to look at the net contribution of a migrant which takes into account the age of the migrant and how the net fiscal position may change depending on the life cycle. The second approach estimates the net fiscal contribution by calculating the net present value of all taxes paid minus all transfers received throughout the lifetime of the migrant. The dynamic model, logically, must involve a set of assumptions including the average unemployment rate of migrants, their probability of return to their home country, their fertility rate and the marginal propensity to consume or to save. All of these assumptions will have a strong influence on the outcome of any model causing the studies using this approach to be less robust and reliable.

An interesting static study by D. Card of UC Berkeley analyzes the fiscal effects of immigration on different cities in the **United States of America** with varying populations of migrants. The study engages a regression OLS model leveraging data from the National Bureau of Statistics and from several studies of Ivy League Universities (Card 2007). The model relaxes property and sales tax, real estate tax, or local income tax – we can assume that this tax is either nonexistent or identical for both groups. This study analyzed the aggregate contribution paid through state, federal, local and Social Security taxes of two groups; immigrants and the native population. This contribution was compared against the respective transfers which the groups received from the state to find the net position. The conclusion of this study is that immigrants, in the United States, contribute on an annual basis on average \$80 less than the native population. However, immigrants also receive on average \$600 less in transfers from the state than the native population does. When comparing these two figures, it is fair to say that the fiscal standing of immigrants in the US is better than that of the native population. This effect can be easily

explained by differences in demographics. Children are likely to receive more support from the state. Only 6% of the immigrant population is under the age of 16, while among the native population this age group is represented by 23% of the population. In OECD countries, children do not work, thus they do not contribute to the state through income taxes, however they are eligible to receive benefits from the state. The static models, unfortunately, do not account for the changes in the net fiscal contribution over time or make a forecast of the future. Therefore, these studies may be inaccurate in assessing the long-term fiscal effect of immigration.

From the dynamic studies, the calibrated general equilibrium overlapping-generations model proposed by Storesletten is a good quantification of the net present value fiscal gain that a government might potentially experience due to immigration (Storesletten 2008). The paper studies the effect of immigrants on fiscal returns in the **United States of America** and differentiates them according to their skill, which can either be low-skilled, medium-skilled or high-skilled. The results of the study can be summarized in the following graph:

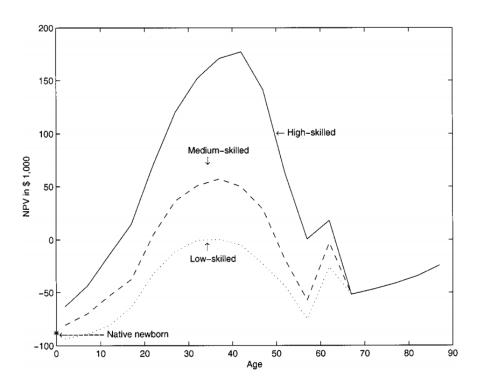


Figure 10 - Net Fiscal Gain of Immigration (Storesletten 2008)

On the vertical axis, the graph shows the Net Fiscal Gain expressed as net present value (NPV) in 1993 US Dollars. The horizontal axis shows the age of the immigrant and the lines represent the net fiscal gain in the given year of a migrant depending on whether he or she is low-skilled, medium-skilled or high-skilled.

The findings of the study on fiscal contributions in the USA were as follows:

- The net fiscal contribution is highest when the immigrant is between 35 and 44 years
- The overall position of an average migrant in the USA, regardless of skill is a positive net contribution of \$7,400 to the federal budget
- A high-skilled immigrant will **contribute** on average \$96,000
- A medium-skilled immigrant will **cost** the government on average \$2,000
- A low-skilled immigrant will **cost** the government on average \$36,000
- The discounted governmental **cost** for each illegal immigrant is \$54,000, while the cost of a low-skilled legal immigrant is only \$36,000
- To maximize the public contribution to the budget, the government should attract high-skilled immigrants aged between 40 and 44, ideally without children as they possess a cost to the government.

The fairly obvious conclusion is that high-skilled migrants contribute much more than medium-skilled, who receive from the government a little more than what they pay. Low-skilled migrants cost the government on average \$36,000 throughout their lifetime. However, what is most important is that if we take migrants as whole, regardless of their skill, their average contribution to the USA budget is positive at \$7,400 per lifetime of an immigrant. This conclusion rejects popular belief in the society, that immigrants cost the government a lot of money.

Another country in scope is **Germany**. The fiscal effects of immigration will be examined from a static perspective using the study of Bonin, who calculated the net fiscal impact of immigrants in Germany in the fiscal year 2004. The findings of the study are as follows (Bonin 2014):

- The payments made by a migrant to the federal budget exceed the transfers received by 2,000 EUR per person. The net fiscal contribution is therefore positive.
- If the aging of the migrant population is taken into account then throughout the lifetime of the migrant, the government is still expected to have a positive net position of 11,600 EUR per migrant in net present value.

To add some diversity to this dissertation, we will introduce the fiscal effects of Slovak students studying in the Czech Republic. Students, coming to study to the Czech Republic for several years are also a type of migrants. In 2014, the Czech Republic welcomed 22,680 Slovak students to attend public universities is the country. This accounts for almost 7% of all students in the country. Public universities in the Czech Republic are free for EU citizens who study in Czech language. Due to the similarities of languages, it is very easy for a Slovak student to study in Czech language and thus receive free and better education than he or she would receive in Slovakia. The study of the Masaryk University in Brno concluded (Masaryk University 2015):

- Slovak students cost the Czech government on between 67,000 CZK and 79,000 CZK per student per year
- The Slovak students bring in between 81,000 CZK and 220,000 CZK per student year.
- In any case, the economy is boosted by an inflow of capital and increased demand
- Over 50% of Slovak students wish to stay in the Czech Republic upon finishing their studies. In 2013, the net fiscal contribution of all Slovak citizens who graduated from a Czech university and stayed in the country to work was 525,000,000 CZK.

Despite popular belief that Czech tax payers pay for the education of their Slovak friends, it seems that the foreign students contribute more to the government than what they receive. Apart from the fiscal effects, Slovak students increase competition and internationalize Czech universities which drives up the prestige and quality of Czech education.

The **recent fiscal effects of immigrants in OECD countries**, can be summarized with the following data:

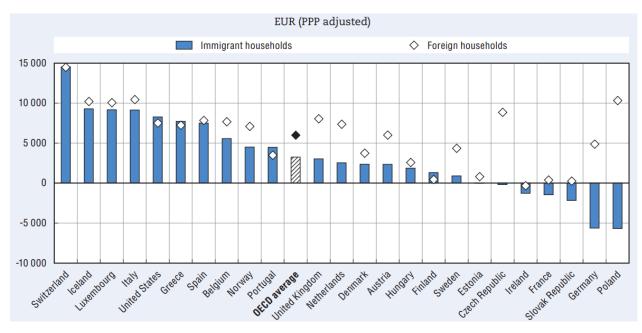


Figure 11 - Net direct fiscal contribution of immigrant households 2007-2009 average. (Data: Liebig 2013)

The above table states that the average net fiscal contribution of immigrant households in developed OECD countries is positive almost in all cases. Few countries have a negative contribution. In Ireland this was caused by the financial crisis and the fiscal system collapse where the net contribution was negative for both natives and migrants. In several Eastern and Central European countries, the negative contribution is explained both by the financial crisis and by the lower levels of education of migrants (Liebig 2013). The **negative contribution in France and Germany** is especially interesting. The reasons for this are described by Bonin and Liebig:

- France and Germany had considerable guest-worker migration and consequently restricted the further influx of migrants. Given the static nature of this study, the accounting methods will show that the guest-workers are likely to be retired and thus receive more in pension than the current contributions of currently working migrants. This is because the group of currently working migrants is smaller than the group of now retired guest-workers (Bonin 2014).
- France and Germany have received significant numbers of humanitarian migrants (refugees) who are likely to have lower fiscal contributions due to their labor-market participation restrictions and a stronger propensity to receive social support.

3. POLITICAL ECONOMY AND PUBLIC OPINION

The discussion on the effects of migration on the labor market is at least as old as the art and science of economics. As mentioned in the introduction; the public, the media, and, of course, the politicians have lively and heated debates about the impact which immigrants can have on the economy and society of the receiving country. The most tangible and discussed immigration topic is the effect on the labor market. This is because the labor market effects will directly influence the lives of the native population; whether through a change in nominal wages, work opportunities or through the structure of the labor market. The public opinions that immigrants "take jobs" from the natives and cause a decrease in native wages are present in most of the developed OECD countries (Docquier 2014). However, the rationale behind this statement was challenged by Peri of UC Davis who examined economic literature on the impacts of immigration on a developed country.

First of all, it is necessary to present the current public opinion on immigration in developed countries. For instance, in seven selected OECD countries, approximately half of the total population is of opinion that "Immigrants depress the wages of natives". The below graph shows the proportion of people who agree with this statement split by country between 2009 and 2011.

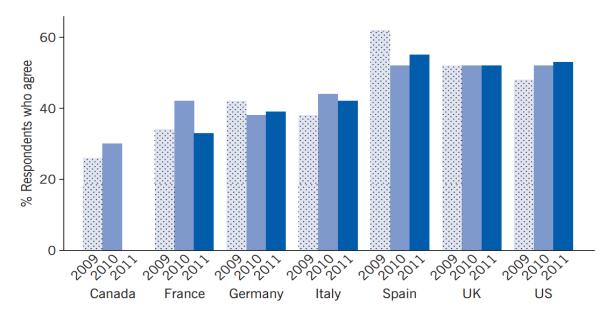


Figure 12 - Do immigrants depress the wages of natives? (Peri 2014)

The public opinion on the fiscal effects of migration for 14 selected European OECD countries is summarized in Figure 13. Respondents indicated their stance towards immigration from non-EU and non-EFTA countries on a scale from 1 to 4, where 1 is a restrictive view on immigration and 4 is pro-immigration view. The respondents are then broken down by their opinion on whether immigrants are net recipients (blue) or if they are net contributors (gray). It is no surprise that persons who believe immigrants are net recipients are in favor of restrictive policies.

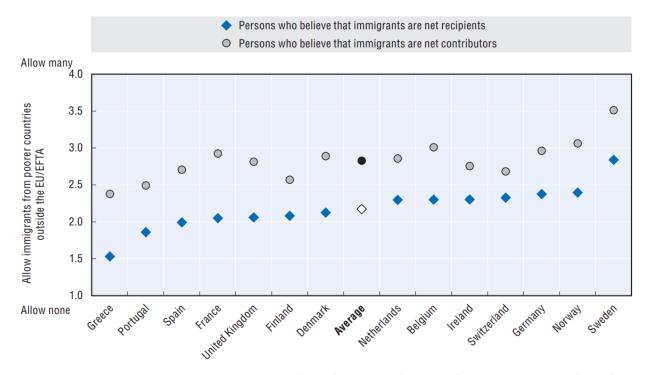


Figure 13 - Do immigrants receive more than they contribute? 0 they receive more than they contribute, 10 they contribute more then they receive. (Liebig 2013)

Clearly, the public opinion is the main driver of the political economy. That is, in its essence, the way how programs of politicians leverage public opinion to get themselves reelected. Consequently, the politicians will drive changes to economic policy to match the preferences of their voters, creating a "bottom to top" system. The beliefs summarized in the two figures above; that "immigrants depress the wages of natives" or that "immigrants receive more transfers than the tax they pay" are strong examples of how public opinion will lead to an increase of preferences for politicians promising to restrict immigration (Guardia 2006). Following the election of a politician or party with anti-immigrant opinions it is likely that their legislative power in their respective Houses of Parliament will support the implementation of restrictive immigration policy.

Before making this assumption, it is timely to go a few steps back and refresh our findings from chapter 2.2 to assess whether the public opinion that "immigrants depress the wages of natives" is correct in the first place.

A paper by Peri summarized the effects of immigrants on the wages of natives by analyzing 27 studies published between 1982 and 2013 (Peri 2014). The countries which were examined in these 27 studies included the USA, Germany, Canada, Spain, the UK, Austria and others. All of the studied countries are industrialized and developed OECD countries, thus they relevant for this dissertation without exception.

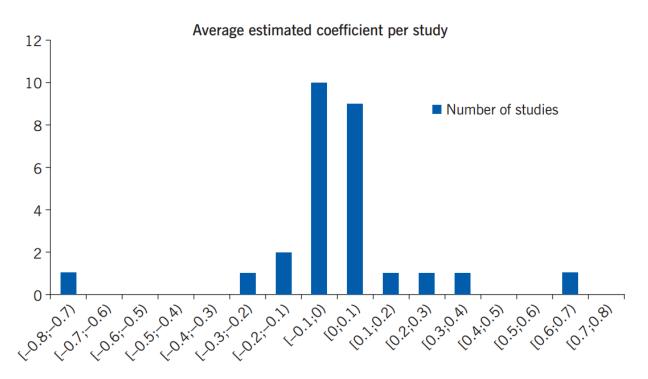


Figure 14 - The effect of immigration on wages from 27 studies. (Peri 2014)

The figure above shows the number of studies on the Y axis and the change of wages to the domestic labor force in % on the X axis. The approach is marginal, meaning that the graph will show the percent increase in wages (dependent variable) caused by an increase in the number of immigrants by 1% (independent variable). The bar graph informs that 19 out of 27 studies indicate that the average effect that immigrants have on the wages of domestic workers is located between -0.1 and +0.1%. A negligible number. In fact, the average of these 27 studies results in a positive

effect on wages (increase), by some 0.05% for every 1% increase in the number of migrants. The above summative study is robust academic evidence that in vast majority of cases immigrants do not depress the wages of natives in developed countries. Now it is timely to consider the views and opinions of the domestic population who often believe otherwise.

Ortega (2009) examined how the labor-market exposure can be the determinant of the attitude towards migration and further expanded the existing literature on this topic by Dustmann (2008) and Peri (2009). In essence Ortega splits jobs into two categories; on the one side jobs which require a high investment into human capital and thus are communication intensive (skilled) and on the other side jobs which do not require prior investment into human capital (unskilled). The competition for jobs between migrants and natives is thus defined by their relatively skill which is usually a reflection of their education. The study assumes that migrants are on average less educated, thus less skilled. This means that the migrants will be competing for jobs with the unskilled natives. The skills do not only reflect formal education such as that obtained at universities, but also relevant on-the-job training, learning-by-doing and other forms of instruction (Ortega 2009).

The quantitative study which was facilitated in 25 developed countries yielded the following results. First, the jobs available in a specific region may determine the attitude towards migration depending on whether migrants may embody competition for these (usually unskilled) jobs in the given region. Second, being actively employed in a skilled job will lead to a more pro-immigrant attitude. The workers who have these skilled jobs either have tertiary education or several years of job-specific training making them "skilled". Third, skilled workers will try to avoid being in jobs where they could face potential competition from migrants and thus they will engage in a career which requires intensive communication skills in the native language.

It is difficult to assess why skilled workers, who have attained higher levels of education and jobtraining are more in favor of migration. It can be due to the fact that unskilled migrants are less likely to compete with them for jobs thus they are indifferent to their presence. Alternatively, it can be caused by a change of values which are the outcome of schooling, for instance; greater levels of tolerance, understanding or even solidarity to those who are in a worse socio-economic situation. Either way, this demonstrates how the skills of natives can determine the political preferences towards migration policy.

Immigrants can impact the domestic economy in more ways than just through the labor market; for instance, through fiscal contributions. The section 2.3 of this dissertation introduced the theoretical framework of the fiscal impacts of migration and leveraged studies from developed countries including Germany, the Czech Republic and the USA. There was no material evidence of a long-term negative net fiscal contribution by immigrants – in most cases it was a positive effect, sometimes already in the short run. Though studies for France and Germany show a short-term negative net contribution, the long-term effect is known to be positive (Bonin 2014). With the population ageing in most developed countries, it seems that migrants weren't recognized or welcomed as a solution to this issue, at least based on the public stance towards migration.

Having introduced the political economy and public opinion behind immigration policy in a general fashion applicable to the current situations in developed OECD countries, it is now timely to discuss the selected countries. The next sub-headings will be dedicated to the concrete implications on public opinion caused by immigration and policy in Germany, the Czech Republic and the USA.

3.1. GERMANY

Empirical evidence about the impacts of migration in Germany shows that there has been a very small impact on employment opportunities or wages of natives due to incoming migrants. In fact, this small impact was on average more positive than negative, mainly due to the increase in wages of skilled workers who are primarily represented by the domestic population (Epstein 2006).

Ironically, a 2016 study from the Eurobarometer shows that German citizens claim that immigration is one of the top three social, economic and political problems in the country and in the EU. This opinion, or to be exact, this fear of immigrants is shared by most EU member states (Eurobarometer 2016). The increasing numbers of migrants, combined with relatively-high unemployment rates in certain regions or countries in the union cause panic, xenophobia and a change in political preferences.

The Socio-Political situation in Germany escalated in the past years as the country adopted liberalized asylum and migration laws and several humanitarian conflicts transpired in vicinity of the EE. This caused more than 1 million migrants to arrive in Germany in 2012 and 2013 and nearly 1.5 million in 2014. The unprecedented inflow of economic and humanitarian migrants fueled division in the society. The tension continued to escalate with the news of the large-scale acts of sexual harassment in several German cities perpetrated by North African migrants on New Year's Eve of 2016 (BBC News 2016). Unlike France, Spain and the UK, as of December 2016, Germany has not experienced a terrorist attack planned by the Islamic State. The two small attacks of radicalized individuals who attacked passengers on a train with an axe (BBC News 2016), and the Syrian suicide bomber who killed five people at a music festival put the openness of the German society to a test.

The German government still invests into research of new policies and pilot projects to channel migration so that it has positive effects on the society and mainly on the economy. We shouldn't forget that the shortage of qualified workers according to a study by Ernst and Young costs German companies 31 billion EUR, expressed as loss in annual revenue. The demographics of Germany, as discussed, aren't very optimistic either. By 2020, in under 4 years, the economically active population will decrease by 1.5 million, and the annual decrease of output will be 70 billion EUR (Migration Policy Institute 2016).

3.2. THE CZECH REPUBLIC

In the Czech Republic, the Academy of Science conducts a survey with over 1,000 respondents which proportionally represents the population above 15 years of age and accounts for differences in gender, age, education, region and the size of the urban or rural settlement. The result showed that 68% of the Czech citizens believe that immigration leads to an increase in the unemployment rate. Also, 71% of the Czech citizens believe that foreigners represent a great security risk (STEM 2015). It is important to note, that the Czech Republic currently has an unemployment rate of 5.3%, one of the lowest in the EU and a country of 10 million has 139 thousand job vacancies (Czech Statistical Office 2016) and no history of terrorism caused by immigrants or significant violent protests. It is difficult to imagine that economic rationality would be behind a restrictive

immigration policy. It seems that in the case of the Czech Republic, it is the fear of the unknown which reflects into political preference which consequently drives the restrictive immigration policies and possibly reduces the potential of economic growth which is fueled by influx of labor.

3.3. THE UNITED STATES OF AMERICA

Though the effects of migration in USA are according to most studies positive; both in terms of labor market effects and fiscal effects, the attitude towards migration still remains rather negative (Borjas 1996). Card develops a robust OLS model which proves that cities with high levels of immigrants enjoy the highest prosperity which is defined by higher wages for both native and immigrant workers, higher prices of real estate, higher rents, and a much higher gross product per capita than cities with a lower proportion of immigrants (Card 2007). This is a different and somewhat original approach to assessing the benefits of migration, but certainly it is valid. The results are that the richest cities in USA; Los Angeles, Chicago, New York, Boston, and the Silicon Valley area all have a proportion of migrants which is among the highest in the country (Card 2007). Again, the implication is that migration is economically rational, yet publically opposed (Borjas 1995).

3.4. JUSTIFICATION OF PUBLIC OPINION IN FAVOR OF RESTRICTION

The vast majority of studies introduced in this dissertation showed that migration has a neutral, or in most cases a slightly positive labor market and fiscal effect (Peri 2014). Yet, public opinion which will influence future policy is calling for the restriction of migration. The next paragraphs will attempt to understand the rationale behind this public opinion.

Firstly, immigrants are likely to have a very different preference when it comes to consuming public goods (Baquir, Easterly 1999). For instance, the native population might consider defense a top priority, while the migrants might not care about defense at all. The difference in preference of a public good will also mean a difference in political preferences which will lead to a growing social division. The fact that new immigrants don't have citizenship of the country in which they are now living means that they will not be able to vote and thus express their political opinion in a

legal way which can result in increased frustration. The native population will avoid this "social tension" by not accepting migrants in the first place.

Secondly, a society which does not have immigrants is likely to share the same values, beliefs and promote a certain type of behavior through "positive peer pressure". Economists argue that immigrants who do not share the same set of beliefs are more likely to disobey the law, for example by not paying taxes. This is because they are not pressured by the society to do the right thing, or simply they will not care what native members of the society think about their doing (Miguel, Gugerty 2005). The "social sanctions" such as social rejection or embarrassment for not conforming to the norms or laws can potentially be of no concern to migrants.

Thirdly, people from different backgrounds, whether it is ethnic, religious, cultural or linguistic, are more likely to have issues with integration into the native society. This leads to social tension and the changes in political preference of the native society. For many voters, the social and communitarian aspects of their lives can be more important than economic effects.

Despite the discussed negative views on migration, the positive effects of diversity which often have long-term implications should be reminded. Diversity leads to beneficial skill complementariness on the job market and thus should be economically favorable. A study conducted by Alesina et al. used immigration data from 195 countries to create an index of diversity based on the birthplaces and consequently compare this data to economic indicators such as Total Factor Productivity (TFP) and Gross Domestic Product (GDP) per capita. The study concludes by finding robust and positive correlation between birthplace diversity and both income and productivity. These results were confirmed even after controlling differences in language, ethnicity, education and specific places of origin. This is an indicator of a robust model. Furthermore, the OLS² and 2SLS³ models returned strong correlations for skilled migrants who are responsible for very high values of GDP per capita (Alesina et al. 2013). The study has also proved a positive correlation between diversity of skilled immigration and the number of patents – implying innovation triggered by immigrants.

² Ordinary least squares Regression Analysis

³ Two-Stage least squares Regression Analysis

A very recent study by Docquier confirms the results of Alesina's work. The research paper examines the birthplace diversity in the USA and how it relates to macroeconomic performance measured by GDP in the years 1960 – 2010. The study provides evidence that for every 10% increase in high-skilled diversity, the GDP per capita will increase by 6.2% (Docquier 2016). Diversity among unskilled migrants has no significant negative or positive effects. The diversity of high-skilled and college educated labor explains 3.5% of the output rise in the USA between the years 1960 and 2010. This percentage may not seem significant, however in absolute number it is a material increase.

Essentially, the public opinions may favor a restrictive immigration policy due to the fear of negative effects which may arise in the short-term, impacting the current generation or the next. However, studies have shown that diversity itself is a source of increased economic prosperity measured in GDP per capita. These effects are not as obvious or tangible and become apparent only in the long-run – probably for these reasons they are overlooked.

4. CONCLUSION

The probability and scale of adverse labor market and fiscal effects for the native population are much weaker than perceived by the public. The wide selection of empirical literature on this topic, including the studies discussed in this dissertation find that a decrease in native wages or employment is a very unlikely outcome of immigration.

Since the studies tend to aggregate the effects of migration to the level of a national economy, it is important to recognize that some groups of society may be more exposed than others. Specifically, less-educated natives who are a close substitute to immigrant labor are especially in risk of adverse labor market effects.

If correctly harnessed, immigration policy can be a savior for aging developing countries in need of new labor to uphold economic growth. At the same time, the same countries can be exposed to the threat of "country shopping", where asylum seekers would choose countries based on their welfare systems and then exploit them. Perhaps, harmonization and convergence of European social systems could aid in eradicating this matter.

To conclude, a developed economy certainly does not want to restrict migration, as the labor and fiscal effects are on average more positive than negative and allow for growth of the domestic product. However, it is understandable that restrictive immigration policies are driven by public opinion which is becoming overwhelmingly opposing migration for two main reasons. The first reason being a misconception of actual economic effects of migration and strong lobby from populist groups who overstate the threats which migration can bring to some groups of society – mainly the unskilled and less-educated who will have to compete for jobs with migrants. The second reason why the public is in favor of restricting migration is to limit cultural, social and religious diversity and to avoid potential social tension or security threats. The reality is that policy is determined by citizens who are driven by their subjective and often non-economic rationale and thus the policy can only be as good as the (mis)conceptions of voters.

As part of the conclusive chapter, it is timely to state the **limitations** and the **emerging areas of research** in the field of migration policy.

The economic reasoning in most of the studied literature would focus on either the labor market effects, fiscal effects or both. However, immigration affects a much wider area of fields which are sometimes neglected or certainly not studied in such detail as the two aforementioned areas. The less studied subjects include the intra-EU migration flows which are often motivated by institutions of tertiary education (Colleges and Universities) and the respective funding available for R&D and scholarships of a given country.

Furthermore, a possible emerging area of research in immigration studies could be the effect of immigrants on the housing market through changes to the price of property and the rent. This has been studied in some detail for the USA (Card 2008), but there is little literature examining this topic in the European context. For instance, Ortega's study found that immigrants caused 33% of the Spanish housing boom (Ortega 2009). This suggests that immigration can strongly affect the economy through the housing market in a fairly under-studied field which is not captured by the traditional labor and fiscal effects studies. It is important to note, that some effects of immigration, for example the patents obtained through skilled labor of migrants, can only fruit results and generate return after many decades, meaning that it will be hard to capture this financial flow. The above is mentioned to indicate a possible limitation to the economic approach in this dissertation as there are many unstudied and understudied fields which can heavily effect the economic and social situation in the receiving country following a wave of migration.

I. REFERENCES

LITERATURE AND RESEARCH PAPERS

ABEL, Guy. SANDER, Nikola. 2014. *Visualizing Migration Flow Data*. The Science Magazine, Vol. 343, No. 6178 (March 2014), pp.1520

ALESINA, Alberto. GLAESER, Edward. SACERDOTE, Bruce. 2001. Why Doesn't the US Have a European-Style Welfare System?

ALESINA, Alberto. HARNOSS, Johann. RAPOPORT, Hillel. 2013. *Birthplace Diversity and Economic Prosperity*. Bonn, Germany: The Institute for the Study of Labor.

BLACK, Nigar. HASHIMZADE, Gareth. MYLES, David. 2011. *A dictionary of economics. 3rd ed.* Oxford, UK: Oxford University Press.

BONIN, Holger. 2014. Der Beitrag von Ausländern und künftiger Zuwanderung zum deutschen Staatshaushalt [German]. Center for European Economic Research. Mannheim, Germany.

BORJAS, George. 1994. *The Economics of Immigration*. Journal of Economic Literature, Vol. 32, No. 4 (Dec. 1994), pp. 1667-1717

BORJAS, George. 1995. *The Economic Benefits from Immigration*. The Journal of Economic Perspectives, Vol. 9, No. 2. (Spring, 1995), pp. 3-22.

BORJAS, George. FREEMAN Richard B. 1996. Searching for the Effect of Immigration on the Labor Market. Cambridge, MA, National Bureau of Economic Research.

BORJAS, George. 1999. *Heaven's Door: Immigration and the American Economy*. Princeton University Press.

BURREL, Kathy. 2009. *Polish Migration to the UK in the "New" European Union After* 2004. Ashgate, Surrey, UK.

CARD, David. 2007. How Immigration affects US cities

COLEMAN, David. 2008. The demographic effects of international migration in Europe

CONSTANT, Amelie. BIENVENEU, Tien. 2011. Germany's Immigration Policy and Labor Shortages

DOCQUIER, Frederic. OZDEN, Caglar. PERI, Giovanni. 2011. "The Labour Market Effects of Immigration and Emigration in OECD Countries," Economic Journal, Royal Economic Society, vol. 124

DOCQUIER, Frederic et al. 2016. Multiculturalism and Growth: Skill-Specific Evidence from the Post-World War II Period.

DUSTAMNN, Christian et al. 2003. "The Impact of EU Enlargement on Migration Flows." Immigration and Nationality Directorate of the UK, Home Office, London, 2003.

DUSTMANN, Christian. GLITZ, Albert. FRATTINI, Tommaso. 2008. The Labor Market Impact of Migration

DUSTMANN, Christian. FRATTINI, Tomasso. HALLS, Caroline. 2010. "Assessing the Fiscal Costs and Benefits of A8 Migration to the UK." Fiscal Studies 31 (2010): 1-41.

EASTERLY, William. BAQIR, Reza. 1999. Public goods and ethnic divisions

ECAS – EUROPEAN CITIZEN ACTION SERVICE. 2014. Fiscal Impact of EU Migrants in Austria, Germany, the Netherlands and the UK. ECAS, Brussels.

EPSTEIN, Gil S., NITZAN, Shmuel. 2006. *The struggle over migration policy*. Journal of Population Economics 19, 703-723.

ESIPOVA, Neli. RAY, Julie. SRINIVASAN, Rajesh. 2016. *The World's Potential Migrants. Gallup Inc.*,

GAUTHIER-LOISELLE, Marjolaine. 2010. How Much Does Immigration Boost Innovation?

GUARDIA, Diez. PICHELMANN, Karl. 2006. Labour Migration Patterns in Europe: Recent Trends, Future Challenges

JENNINSEN, Roel. 2006 Economic theories of international migration and the role of immigration policy

JENNINSEN, Roel. 2007. Causality Chains in the International Migration Systems Approach.

JOPPKE, Christian. 2009. *Immigration and the Nation-State: The United States, Germany and Great Britain*. Oxford: Oxford University Press

KERR, William., LINCOLN William. 2010. *The Supply Side of Innovation*. Harvard Business School. Boston, MA.

KERR, William., KERR, Sari. 2011. *Economic Impacts of Migration: A Survey*. Harvard Business School. Boston, MA.

KOSLOWSKI, Rey. 1994. *Intra-EU Migration, Citizenship and Political Union*. Journal of Common Market Studies

KUSNIRAKOVA, Tereza. CIZINSKY, Pavel. 2011. Twenty years of Czech Immigration Policy: Liberal, Restrictive or different?

KRUGMAN, Paul. OBSTFELD, Maurice. 2007. "Resources and Trade: The Heckscher-Ohlin Model". International Economics: Theory and Policy. Boston: Addison Wesley. pp. 67–92.

LIEBIG, Thomas., MO, Jeffrey. 2013. *The fiscal impact of immigration on OECD countries*. International Migration Outlook 2013 – OECD.

MIGUEL, Edward. GUGERTY, Kay. 2005. Ethnic Diversity, Social Sanctions & Public Goods

ONS - Office for National Statistics. 2016. 'Note on the difference between National Insurance number registrations and the estimate of long-term international migration: 2016.'

ORTEGA, Francesc. POLAVIEJA, Javier. 2009. *Labor-Market Exposure as a Determinant of Attitudes toward Immigration*. Institute for the Study of Labor.

OTTAVIANO, Gianmarco. PERI, Giovanni. 2012. "Rethinking The Effect of Immigration On Wages," Journal of the European Economic Association, vol. 10

ÖBERG, Magnus. 1997. Forecasting International Migration in Europe

PARUSEL, Bernd. SCHNEIDER, Jan. 2010. The Current Development of Immigration to Germany

PERI, Giovanni. 2014. "Do immigrant workers depress the wages of native workers?" IZA World of Labor, Institute for the Study of Labor (IZA)

RUHS, Martin. 2006. *Greasing the wheels of the flexible labor market: East European labor immigration in the UK*. Oxford University Press.

RUHS, Martin. 2010. Who needs migrant workers? Labor shortages, immigration, and public policy. Oxford University Press.

STOJAROVA, Vera. 2004. Models of integration of Immigrants in the Czech Republic and their political effects

STORESLETTEN, Kjetil. 2008. Sustaining Fiscal Policy Through Immigration

VARGAS-SILVA, Carlos. 2016. *Briefing EU Migration to and from the UK*. The Migration Observatory at the University of Oxford.

VENTURINNI, Alessandra. MONTOBBIO, Fabio. FASSIO, Claudio. 2012. Are migrants spurring innovation?

ZIMMERMANN, Klaus. 2007. The Mobility Challenge for Growth and Integration in Europe

ELECTRONIC SOURCES

COUNCIL OF THE EUROPEAN UNION: [online]. [Sep. 2016]. Available at: http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/ec/143478.pdf

CZECH MINISTRY OF INTERIOR: [online]. [Sep. 2016]. Available at: http://www.mvcr.cz/soubor/zakladni-data-o-migraci-v-cr-k-30-6-2015.aspx

CZECH STATISTICAL OFFICE: [online]. [Sep. 2016]. Available at: http://apl.czso.cz/pll/stazo/STAZO.STAZO

EUROBAROMETER [online]. [Sep 2016]. Available at: http://ec.europa.eu/public_opinion/index_en.htm

EUROPEAN COMMISSION: [online]. [Sep. 2016]. Available at: http://ec.europa.eu/priorities/migration_en

EUROSTAT [online]. [Dec 2016]. Available at:

http://ec.europa.eu/eurostat/data/browse-statistics-by-theme

MASARYK UNIVERSITY BRNO: [online]. [Sep. 2016]. Available at: https://www.online.muni.cz/udalosti/6458-slovensti-studenti-mu-znamenaji-pro-region-ekonomicky-prinos

OECD MIGRATION DATABASE [online]. [Dec 2016]. Available at: http://www.oecd.org/els/mig/oecdmigrationdatabases.htm

OXFORD ECONOMICS DICTIONARY: [online]. [Sep. 2016]. Available at: http://www.oxfordreference.com/view/10.1093/acref/9780199237043.001.0001

MEDIA AND NEWS

BBC NEWS [online]. [Sep 2016]. Available at: http://www.bbc.com/news/world-europe-35231046

BLOOMBERG NEWS [online]. [Sep 2016]. Available at:

 $\frac{http://www.bloomberg.com/news/articles/2014-05-20/immigration-boom-propels-germany-pastu-k-in-new-oecd-ranking}{u-k-in-new-oecd-ranking}$

MIGRATION POLICY INSTITUTE [online]. [Sep 2016]. Available at:

 $\frac{http://www.migrationpolicy.org/article/new-reality-germany-adapts-its-role-major-migrant-magnet}{}$

STEM SOCIAL RESEARCH CZECH REPUBLIC [online]. [Sep 2016]. Available at: https://en.stem.cz/czech-citizens-are-now-less-accepting-of-foreign-nationals-than-before/

II. APPENDIX

i. ABBREVIATIONS

 $CZ-Czech\ Republic$

EU – European Union

NPV – Net Present Value

OECD – The Organization for Economic Co-operation and Development Investment

UK – United Kingdom of Great Britain and Northern Ireland

USA – United States of America

R&D – Research and Development

ii. LIST OF FIGURES

Figure 1 - Inflow of immigrants as a percentage of the population of the host country $2004 - 2014$.	
Author's elaboration. (Data: OECD 2016)	4
Figure 2 - Migration to and from Europe. (Data: Abel, Sander 2014)	5
Figure 3 - Fertility Rate in Selected Developed Countries. Author's elaboration. (Data: OECD 2016)	12
Figure 4 - Elderly population above 65 years as a % of the population of the country. Authors elaboratio	n.
(Data: OECD 2016)	13
Figure 5 - The Immigration Surplus (Borjas 1994)	14
Figure 6 - Labor Market Effects: Unskilled labor (Dustmann 2008)	17
Figure 7 - Labor Market Effects: Demand for skilled labor (Dustmann 2008)	18
Figure 8 - Labor Market Effects: Marginal Product of Unskilled labor (Dustmann 2008)	19
Figure 9 - Beveridge Curve (Zimmermann et al. 2007)	21
Figure 10 - Net Fiscal Gain of Immigration (Storesletten 2008)	25
Figure 11 - Net direct fiscal contribution of immigrant households 2007-2009 average. (Liebig 2013)	28
Figure 12 - Do immigrants depress the wages of natives? (Peri 2014)	29
Figure 13 - Do immigrants receive more than they contribute? 0 they receive more than they contribute,	
10 they contribute more then they receive. (Liebig 2013)	30
Figure 14 - The effect of immigration on wages from 27 studies. (Peri 2014)	31