Language education and the employment rate
- A quantitative study examining the impact of language education on the employment rate of immigrants in Swedish municipalities

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Abstract

This thesis studies the impact of language education on the employment rate of immigrants in Swedish municipalities. Based on previous research and the theory of Hermut Esser, it aims to find a positive correlation between learning the Swedish language and the employment rate of immigrants. The language knowledge is measured by a Swedish for immigrants (SFI) - language course, which is from 2018 an obligatory part of the integration plan. Therefore, this study tries to see if passing the SFI language course affects the employment rate of immigrants in Swedish municipalities. To examine the impact of passing SFI language course on the employment rate of immigrants, Ordinary Least Square (OLS) regression analyses are used and data will be collected from Statistics Sweden (SCB) and the Swedish Association of Local Authorities and Regions (SKL).

After analyzing 240 municipalities between the years 2013-2016, and controlling for different variables, the results show that the passing of the language course decreases the employment rate of immigrants. This result can be explained firstly by the fact that language is no longer a vital part on the Swedish labor market or secondly, by stating that the SFI-language course does not give the level of Swedish that is needed to gain access to the labor market. Further by adding dummy variables for the municipalities to control what is constant during time, the result is no longer statistically significant. This result means that there are important variables that vary in the municipality level, which are affecting the language education and the employment rate of immigrants. However, as SFI language course is important part of the integration program, and this study cannot prove correlation between employment and SFI, the quality and the importance of the course can be lightly questioned. Further studies are needed to explain the low employment rate of immigrants.

Keywords: immigration, integration, labor market, unemployment, language education, sfi
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1. Introduction

In Sweden, during the past 50 years the employment gap for native-born and foreign-born individuals has increased significantly.¹ In 2016, the employment rate for immigrants was 61.6% while for native-born individuals it was 83.9% (Figure 1). The unemployment that many immigrants face in Sweden, is costly for society and the individuals. Considering the ageing population, it will be a challenge to maintain the welfare system without labor market integration of immigrants. Immigrant integration has been prioritized in the political agenda in Sweden and the refugee crisis was one of the most important topics in the elections in fall 2018. This debate was one of the reasons that led to the right-wing populist anti-immigration party gaining almost 20% percent of the votes for the first time in history. The increasing number of immigrants (Figure 2) and the increasing employment gap between foreign-born and native-born individuals have led to a situation where more effort in immigrant integration is needed as well as more assessment regarding the already existing policies is required.

Another related problem Sweden is currently facing is the varying employment rates of foreign-born and native-born individuals in the municipalities. For example, in the Swedish municipality Mellerud the employment rate for foreign-born individuals is only 38.5 and in Ale the same employment rate is 71.9. However, in both municipalities the unemployment rate for the native-born people is just a bit below 5 percent and the percent of foreign-born in these municipalities is also around the same with slightly below 20 percent.² Later this study shows that the percent of immigrants and the unemployment rate are two important factors affecting to the employment rate of immigrants. However, these factors cannot solely explain the lower employment rate of immigrants.

Swedish government has strongly focused on the Swedish language education of immigrants, as it is seen essential in the labor market integration.³ Swedish for immigrants (SFI) –language course is one of the most important ways for immigrants to learn Swedish. However, this language course is widely criticized in research and media. In April 2018, the Swedish Schools Inspectorate (Skolinspektion), reported in their rapport that there is a lot to review and improve. The report made 42 observations in 15 municipalities and found out there are problems in finding adequately trained teachers, new students joining ongoing classes creates further problems and the lack of

¹ Christer, Lundh, ”Invandringen till Sverige”, Svenska tryckcentralen, 2005, p.63
² Kolada, Kommun och landstingsdatabasen, ”jämföra rer”
³ SKL, ”Nyckeltal med integration i fokus”, Advant produktionsbyrå, 2017 p. 19
individual guidance prevails. Despite these weaknesses, SFI is one of the most important parts in the integration process and for finding employment for immigrants. Therefore, it is important to analyze whether the language education has an effect to the employment rate in Swedish municipalities.

Figure 1. Employment rate in percent (%) in Sweden, years 2000-2016

![Employment Rate in Sweden](image)

Source of data: SCB

1.1 Aim and Research Question

Based on previous research and theories on the importance of language in the labor market integration, the aim of this study is to analyze whether language education has an impact on the employment rate of immigrants. More closely, it will analyze the percentage of immigrants passing the SFI language course and whether the passing of the course has an impact to the employment rate of immigrants in Swedish municipalities. There is no data on how well individuals know the Swedish language and therefore this study analyzes the percent of people who pass the Swedish for immigrants (SFI) -language course as a measurable variable.

Economic immigration studies show that individuals’ human capital, their period in the country and the situation on the labor market affects the employment rate of immigrants. However, these factors are difficult for individuals to actively change in a short time frame. Lundh also explains that even if it is proven that the previously named factors affect the integration process, all

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4 Samtiden, ”Skolinspektionen om sfi: mycket att se över och förbättra”, 2018
5 Christer, Lundh, ”Invandringen till Sverige”, svenska tryckcentralen, 2005, p. 71
an economist admit that there are other factors affecting the equation. There are four common known hypotheses, explained by Lundh. Firstly, “Swedish knowledge”, which covers learning the local language and the norms as an important part of integration and finding employment.\(^6\) Secondly, “network”, the linkage between the immigrants, employment service and real employment supporting the immigrants. In addition, networks within immigrant groups are important.\(^7\) Thirdly, “ethnic discrimination” is named as a hypothesis for insufficient integration. It includes that the person is discriminated because of his/her background or appearance.\(^8\) Lastly, insufficient integration can be seen as responsibility of the “Swedish institutions”, which lack the means for better integration policies.\(^9\) This study will concentrate on the first hypothesis, which is the effect of language learning on the labor market integration, however also trying to acknowledge the other hypothesis and control them. The research question that this paper tries to answer is:

**Does language education have an impact on the labor market integration of immigrants in Swedish municipalities?**

What should be noted in the beginning is that this thesis uses concepts immigrant and foreign-born interchangeably. Immigrants are operationalized as foreign-born individuals who live in Sweden. This thesis has chosen to use both concepts simultaneously as they are so presented in the literature.

To examine the impact of language education on the employment rate of the immigrants, Ordinary Least Square (OLS) regression analyses are used and data is collected from Statistics Sweden (SCB) and the Swedish Association of Local Authorities and Regions (SKL). This study controls for some important factors such as the unemployment rate of native-born and the percentage of immigrants, which can affect the relationship between language education and the employment rate of immigrants. Immigrants from Europe and especially from the Nordic countries have a higher employment rate than immigrants from outside of Europe.\(^{10}\) This study acknowledges these differences but will analyze immigrants as a one big group. This is mainly done because SFI data is not divided according to the country of origin. In addition, this study will not take into consideration the sex of the immigrants, as it does not want to make any separations between different groups of people.

This paper studies the time period between years 2013-2016, due to access to new improved data

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\(^{6}\) Ibid, p.73  
\(^{7}\) Ibid, p. 75–76  
\(^{8}\) Ibid, p.76–77  
\(^{9}\) Ibid, p. 78  
\(^{10}\) SCB, “Arbetskraftundersökningar(AKU)” 2018
on passing the SFI course. Even if Sweden is a very homogenous country, the municipalities have a strong control over their own policies, leading to a different implementation of certain policies at the municipality level. As the immigrant integration policies are decided at the local level it is crucial to analyze and compare municipalities in their integration policies; therefore, this study examines the local level. As a good example, immigrants should be able to take the SFI language course within three months after they get their legal status according to educational law.\textsuperscript{11} However, in some municipalities the waiting period can be around 6 months.\textsuperscript{12} Lastly, this study will include dummy variables for the municipalities and years, so that the variation between municipalities over time will not affect to the regression analysis.

1.2 Relevance

The relevance of this study to political science is vital, as the low employment rate creates problems to the whole society. This study analyzes the effectiveness of a political decision, the SFI course, and its outcome on the labor market. It is important to study whether this course in fact increases the employment rate of immigrants. As Sweden has a comprehensive welfare system and an ageing population, estimations show that it needs labor force immigration to meet with the lack of labor force in the future. In 2017, there were 1 877 050 foreign-born individuals living in Sweden, making up almost 20\% of the population.\textsuperscript{13} The number of immigrants has increased rapidly over the past decades, which can be seen from figure 2. There is a higher proportion of foreign-born individuals in Sweden than in average in OECD countries, making Sweden a suitable and relevant country for immigrant integration studies. Firstly, to present the relevance of this study the Mipex index will be presented to show the qualities and capabilities that Sweden has in the field of integration policies. Secondly comparison to other OECD countries will be done, to be able to understand the situation in Sweden better.

Migrant Integration Policy Index (MIPEX) is one of the most comprehensive and unique tools which measures policies to integrate migrants in all EU Member States, Australia, Canada, Iceland, Japan, South Korea, New Zealand, Norway, Switzerland, Turkey and the USA. It has developed 167 policy indicators to create a multi-dimensional picture of migrants’ opportunities to participate in society. The index is a useful tool to evaluate and compare what governments are doing to

\begin{itemize}
\item \textsuperscript{11} Skolverket, "Rätt till, behörighet och antagning för sfi", 2018
\item \textsuperscript{12} Skolverket," Varannan kommun har kö till Sfi", 2017
\item \textsuperscript{13} SCB, “Utrikes födda i Sverige”, 2018
\end{itemize}
promote the integration of migrants.\textsuperscript{14} MIPEX has ranked Sweden as number one in the integration policies and in the section of labor market mobility Sweden has received 98 out of 100 points.\textsuperscript{15} MIPEX states that Sweden’s 2009’s Introduction Act aims to improve the country’s specific labor market model and the situations of different types of newcomers within it. All workers are treated equally and Sweden uses targeted support to address their individual needs and eventually access mainstream training opportunities. Sweden is increasingly investing its ambitious targeted support into the employment programs proven most effective in national and international impact evaluations. They also state that nearly all non-EU newcomers enjoy favorable legal access to the labor market. Temporary migrant workers can quickly change jobs and sectors. Labor market regulations do not create any formal distinctions between Swedish and EU/non-EU citizens. Immigrants can start applying for any job in the private or public sector from the day one.\textsuperscript{16} It is true that Sweden has one of the best conditions for labor market integration as listed above but there is still room for improvement as Sweden still fails to succeed in the labor market integration.

In 2017, the overall employment rate for immigrants in Sweden was 66\%, which is below OECD average, while the overall employment rate in Sweden is fourth highest in the whole OECD area (77,4).\textsuperscript{17} The average gap in unemployment rates between the foreign- and native-born in the OECD area has declined during the period of 2012-17 by one percentage point. While in Sweden, as also in Finland and Norway, there was an increase of the unemployment gap by 0.5 to 2 percentage points, as can be seen from the figure 3. When comparing the unemployment rate gap between native- and foreign-born, Sweden has a highest gap that has only increased during 2012-2017.\textsuperscript{18} Sweden has taken more refugees than many other countries in the period of 2015-2017, but as can be seen from the figure 1, the situation has not been better before the year 2015. Comparison to other OECD countries helps to understand the situation in Sweden better. According to Mipex, Sweden has good qualities for labor market integration. Nevertheless, the research conducted in OECD countries and Sweden show a wide gap in the employment rate between foreign-born and native-born individuals. This creates a relevant political problem, which needs more attention.

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\textsuperscript{14} Migrant integration policy index, 2015
\textsuperscript{15} Migrant integration policy index, 2015, “Country rapport: Sweden”
\textsuperscript{16} Ibid.
\textsuperscript{17} Ibid.
\textsuperscript{18} OECD, “International Migration Outlook”, 4\textsuperscript{th} edition, 2018, p.82
\end{flushright}
2. Historical Background

To be able to understand the integration policies that Sweden has today, it is important to study the historical development. This section explains the history of Swedish immigration and integration policies in more detail. Sweden has a high number of immigrants compared to its population and it’s due to many historical events. In addition, the current policies and regulation that affects the immigration and integration policies will be shortly presented.
2.1 The Integration Policies in Sweden

The goals of integration policies in Sweden are equal rights, obligations and opportunities for all, regardless of ethnic or cultural background.19 The Swedish Government is responsible for drawing up guidelines for Swedish integration policy. Sweden is a unitary however highly decentralized state which means that the immigrant integration policies are quite independently decided by the local municipalities within the guidelines of the government.20 Municipalities have their own local governments. Sweden has a clear focus on finding employment as a part of integration process. The government states: “The idea is to create better preconditions for immigrants to quickly become part of labor market or education. Every step should lead to finding a job”.21

2.2 The History of Immigration in Sweden

The Swedish immigration’s and integration’s directions, ways and goals have changed over time. Sweden has a long tradition with immigration and therefore 20 percent of its population today are born outside of Sweden. Since the 1930s immigration into Sweden has been greater than emigration.22 In the period after the Second World War most of the immigrants came as working immigrants from Nordic countries and Western Europe. Also, there was a flow of refugees from Eastern Europe and developing countries arriving to Sweden. In that time, the foreign labor market forces were temporary, and the workers could not take their families with them. Still in most of the cases the labor market integration resulted in permanent settlement.23 From the 1950s to the mid-1970s most of the immigrants were labor market immigrants. The greater part of the labor immigrants in this period came from the Nordic countries (especially Finland), West Germany, Austria, Italy, Greece and Yugoslavia. The labor immigration was a result of the economic and industrial expansion in Sweden from the late 1940s to the mid-1970s.24 Sweden did not participate in the Second World War, which gave an economical advantage as it avoided the costly war. Instead of reconstructing after the war they could put more effort in the technological development. Basically, until the middle of the 1960s the immigration to Sweden was unconstrained, because of the scarcity in the labor market forces and the strong economic growth. In the end of 1960s trade unions brought the introduction of more restrictive regulations for labor immigration into

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19 Regeringskansliet, ”Swedish integration policy”, 2009
20 Migrationsverket, ”Vem bestämmer?”, 2013
21 Regeringskansliet, ”Nyanländas etablering”
22 Christer, Lundh, ”Invandringen till Sverige”, Svenska tryckcentralen; 2005, p.13
23 Ibid, p.15-16
24 Ibid, p.23
Parliament voted on new more restrictive regulation in the labor market immigration in 1969, which are still today partly taking place. While in the 1970s the regulation become harder for labor market immigration, the refugee regulation become more permissible and there was an increase in the number of refugees. At that time, many refugees came from Latin America and Asia. The 1980s brought refugees from the Middle East and Africa. More European refugees arrived in the 1990s, fleeing the civil war in what had been Yugoslavia. In the late 1990s and in the first decade of the 21st century, people from the Middle East and Africa again formed the major immigrant group. In 2017, 144,489 immigrants came to Sweden, most of them from Syria, Afghanistan and Iraq and today 1.9 million is born outside of Sweden.

2.3 The History of Integration Policies in Sweden

The integration policies have also changed throughout the history. Back in history, Sweden had a more cultural and language based assimilation policy toward its indigenous and ethnic minorities. The idea of the policy was to make the ethnic minorities similar to the majority population. The immigration during the post-war period, however, showed that such a policy was unsustainable and ineffective, and in the 1960s immigrants and minorities demanded possibilities to preserve their cultural and linguistic heritage.

In the mid-70s, the government changed the integration policies and it was easier to maintain the cultural and linguistic heritage. Assimilation was switched to the pluralist idea, arguing that it is good for the society to have multiculturalism. However, in the labor market such change never happened. In the labor market the minorities and the immigrants were expected to be as similar as possible to the majority population.

During the 1990s, the government changed its perspective. The importance of cultural plurality was still in place, but the need of adaption to Swedish conditions was also required. The aim of the integration was that the adaption needed to come from the population itself. The terminology behind the word integration came from the idea that something new was created when two parts were united, and this two-side starting point was underlined. In the 1990’s with the growth of refugees arriving to Sweden, the awareness of the difficulties of integration increased.
Employment Service started to demand that refugees complete the SFI course before they could acquire a job. Since the mid 1990s, many projects have been undertaken at different levels of society to improve integration.\textsuperscript{33} Still today, SFI remains as important part in the Swedish integration policies.

The employment gap, which can be seen from figure 1 is a quite new phenomenon that took place in 1980’s. The advantage for the immigrants was a lower middle age when compared to natives\textsuperscript{34}. In the 1950-1970 the immigrants involved much faster in the labor market and the employment rate in fact was higher for immigrants than natives for many years.\textsuperscript{35} People born outside of Sweden had even higher wages compared to majority due to higher employment rate and commonness of working in two jobs.\textsuperscript{36} The employment rate rather suddenly started to decrease for the immigrants between 1980’s and 1990’s. One of the main explanations for this is “Hela Sverige Strategy”, taking place in the mid-1980’s. It was a strategy to place refugees to different municipalities, some of which had for example accommodation but were lacking employment opportunities. Theorists have shown that this was very negative for refugees’ labor market integration.\textsuperscript{37}

3. Theoretical Framework

This section shows how the hypothesis of this study is based on a strong theoretical background. Learning a local language has in many theories and previous research been associated with integration and especially the labor market integration of the immigrants. This study is theory testing and it uses Hermut Esser’s research as theory and tries to test it in Swedish municipalities. Even though Sweden has no language requirements or any compulsory citizenship test before applying for citizenship or residence, it is still very hard to live in Swedish society and especially acquire employment without the knowledge of Swedish language. Theoretical framework will be presented in the next section with the help of theory and previous research. Lastly, immigrant integration will be operationalized. Other relevant concepts will be operationalized under research design.

\textsuperscript{33} Ibid, p.57
\textsuperscript{34} Ibid, p.62
\textsuperscript{35} Ibid.
\textsuperscript{36} Ibid.
\textsuperscript{37} Ibid, p.55-56
3.1 Theory

Two theories are presented in this section. Firstly, an overview of functions of the labor market will be made with the theory of human capital. It explains what is needed to find employment and more specifically the role of the immigrants in the theory will be discussed. Secondly, a theory about how language education affects the labor market integration will be analyzed.

The theory of human capital explains the most important ideas in labor economics, which is turning marketable skills of workers as a form of capital, where variety of investments can be made. All the humans are equivalent to acquire a job, when the perfect competition prevails. Therefore, unemployment is explained by the differences in the individuals' productivity. This perspective is important in understanding both investment incentives, and the structure of wages and earnings. Part of the advantages are that it enables us to think of not only the years of schooling, but also of a variety of other characteristics as part of human capital investments. The disadvantages are also related. At some level, we can push this notion of human capital too far, and think of every difference in remuneration that we observe in the labor market as due to human capital.

Immigration implies an initial loss of human capital, as competences from the country of origin are not directly transferable between national markets. In terms of employment levels, this implies an initial employment gap to natives that should decrease with time spent in the host country. The rate of this reduction may however differ by region of origin, meaning that the people coming from countries that differ more from the host country has harder time to integrate. Therefore, in the beginning of the process of integration immigrants are usually missing some of the qualities that are needed in the labor market. As immigrants learn for example a language, their human capital stock grows relative to that of natives and they can better integrate to the labor market and earn higher income. Theory of human capital is commonly used to analyze the labor market gap between native-born and foreign-born individuals.

39 Ibid.
40 Lectures in Labor economics, “The Basic Theory of Human Capital”, p. 3-4
42 Ibid, p.2
Secondly, when analyzing the language’s importance for finding employment, this study will be based on Harmut Esser’s theoretical framework. He has made a research review about migration, language and integration. This study will be based on his finding on how learning a local language is crucial for immigrant integration and finding employment.

Esser argues that in addition to the central factors of educational level and professional experience, comprehensive skills in the national language are extremely important for the labor market integration of immigrants. He explains how a lack of language skills clearly reduces immigrants’ chances of finding work and attaining a higher position, which further leads to reductions in income. He even explains that if the occupation involves communication and coordination the results become even clearer. Esser states that in most cases, the ethnic differences that exists in the labor market success already disappear empirically when only education is controlled for. However, one factor that maintains these differences is the knowledge of the local language. He explains that linguistic skills influence the productivity of the human capital, and that the occupational productivity follows the human capital of applicants and therefore learning a language affect labor market success in addition to other mechanisms.

Esser states in his article that there is almost no empirical evidence on the efficacy of state-oriented language course in Sweden or in Netherlands. There is almost no reliable information in these reports regarding the success of the SFI language course, and how it leads to better language learning and labor market integration. This is the case of Sweden and that is something that raised my interest in the subject. When trying to find data on the integration policies and specially the role of the language, most of the data can be found in the individual level, measured by interviews. Sweco has for example made a survey study about the SFI language course in the Stockholm area. In year 2017, 22 000 students in the SFI course received a survey of how the students experience the SFI language course. In the newspapers there have been lot of discussion and criticism about the SFI language course. There have been articles about the increased workload of the teachers, and the increased size of the classrooms. Even when there are studies and lot of debate in the media, it is hard to find data and studies that would prove that the language course leads to

43 Esser, Hartmut, “Migration, language and integration”, AKI Research Review 4, AKI, Social Science Research Center Berlin, 2006, p. IV
44 Ibid.
45 Ibid.
46 Ibid, p.79-80
47 Ibid, p. 30
48 Storstockholm, ”Vuxenutbildning”, 2017
49 Lärarnas tidning, “Ökad arbetsbelastning på Komvux och Sfi”, 2017
employment. Something this study finds very important because the SFI course is one of Sweden’s most important efforts to integrate immigrants to the labor market. All Esser’s arguments point towards a possible causal relation between language learning and employment and therefore this study is based on his findings.

3.2 Previous Research

In Sweden, there is more research that shows the employment gap between foreign-born and native-born individuals, than research about the explaining factors behind this phenomenon. Previous studies have showed that employment gap cannot be explained solely by individual factors and therefore more comprehensive research is needed. There are two kinds of research most relevant for this study. Firstly, research in the field of integration policies and the results in Sweden. Secondly, research on how learning a language helps immigrants to integrate in the labor market.

Firstly, for the case of Sweden, there is some important research to note here. Lena Schröder has made a study about how the employment rate and the unemployment rate within immigrants and natives differs in Sweden. The difference is affected by the time spent in Sweden and the country of origin. It states that the early research attempting to explain labor market gaps between immigrants and natives focused as a problem of the low knowledge of the immigrants. However, after starting to register information on education, it was no longer possible to explain ethnic labor market gaps with low formal skills. Instead, the persistent ethnic gaps were explained by the fact that immigrants in the 1980s and 1990s primarily came from non-European countries, perceived as culturally distant from the Swedish culture, thus implying a lower transferability of human capital. In combination with structural changes in the labor market that increased the need for communicative skills, ethnic gaps in the labor market were interpreted as a mismatch between supply and demand.

Another study important to analyze here is done by Lina Aldén and Mats Hammarstedt. It analyzes the immigrant integration into Swedish labor market. Their study aims to explain the different employment rates between different immigrant groups and recent trends in the labor market integration. They use new data to illustrate that the Foreign-born Africans and Asians have a lower employment and a higher unemployment rate than other groups. They are overrepresented

50 Lena, Schröder, “From problematic objects to resourceful subjects: An overview of immigrant-native labour market gaps from a policy perspective”, Swedish economic policy review 14, 2007, p.9
51 Ibid, p.11
52 Lina, Alden, Mats, Hammarstedt, ”Integration of immigrants on the swedish labor market”, Linné Universitet, 2014, p. 2-3
in fixed-time employment and underrepresented in managerial positions. Employment is particularly low among family and refugee immigrants. Educated people from these regions are more likely than others to have jobs requiring lower competencies than their educational level. Also, research about the quality of SFI is important to present here. School Inspection makes regular research about the quality of SFI. In 2018, they have made qualitative research in 12 municipalities and in 15 SFI education centers. The results indicate that the biggest problems in SFI education faces are individual adjustment for the education. SFI education should be adjusted to individual need to guarantee a better quality in education and ease the transition to labor market. Precisely in some education centers it is hard to see the linkage between SFI and employment or continued studies. The reasons for this vary. Firstly, the teachers of SFI are not as educated than in other schools. The education levels between education center varies a lot. Also, the pedagogic leadership and the knowledge of second language learning varies. One important part of SFI as showed earlier is to learn the language to find an employment and but it seems that SFI has hard time on making this into reality.

Secondly, what is relevant for this study is how language education affects to integration and especially integration to labor market. Therefore, the study of Abdelkerim and Grace is presented. They studied Newly emerging African communities (NEAC) that have immigrated within 10 years to Australia and tried to analyze why they face challenges becoming part of the labor market. They found that there are multiple reasons for lack of employment and that women suffered the most. Nevertheless, poor English proficiency was one of the main constraints to employment. They even present and analyze the study done by Liu in 2007 based on their findings. She studied English proficiency and labor supply of recent immigrants in Australia. The foundings suggest that those who spoke poor English upon arrival were working up to 6.5 hours per week, while those who spoke “very well” were working 27.5 hours per week.

Jenny Karin Rosén and Sangeeta Bagga-Gupta have made an analysis of the discourses associated with Swedish for immigrants –language course. They have analyzed the development of SFI during history. Important for this study is that they also emphasize the importance of labor market integration within SFI course. In the period of 1994-2005 the criticism was directed towards the

53 Ibid.
54 Skolinspektion, ”Undervisning i svenska för invandrare”, 2018, p. 5
55 Ibid, p.5-7
56 Abdelkerim A, Abdelkerim, Grace, Marty, “Challenges to Employment in Newly Emerging African Communities in Australia”, Australian social work, 2011, p.5-6
57 Ibid.
education and the lack of the Swedish language skills among the immigrants. This was highlighted as a major problem for the society. The lack of Swedish language skills and the knowledge of Swedish work-life was blamed for the high unemployment rate of the newcomers. Also in 2006, the relationship between language and employment was reflected in national board of education’s syllabus. It was stated that “For a person coming to Sweden, knowledge of the Swedish language is an important factor to be able to establish himself or herself in society and in the labor market quickly”. After analyzing the discourses around the SFI, it shows even clearer how language makes a strong base on finding employment even in the discourses.

3.3 Immigrant Integration

There are many definitions of integration. It can be defined as political-legal integration policies, socio-economic integration policies and cultural-religious policies, as it is done by Entzinger. There is many kind of integration and without acknowledging which one is the most important, this paper studies only the second one which is access to the labor market. The reason to study labor market integration is three folded. Firstly, labor market integration is an important part of the integration process. As stated by the European commission “the inclusion of migrants in the labor market is key to ensure their effective integration into the host societies and their positive impact on the EU economy; this entails fully using their skills and realizing their economic potential. They can contribute to addressing skills shortages in certain sectors at all skills levels”. Secondly, labor market integration can quite easily be measured from the employment and unemployment rate, and fits well for quantitative research. Lastly, as presented earlier in this paper, Sweden has a clear focus on the labor market integration. Thus, this paper will concentrate on labor market integration solely and the results of this study reveal nothing about the social or political integration process. Immigrants are operationalized as foreign-born individuals living in Sweden. The country of origin or the status of the immigrants is not important for this study, for example the study does not separate people from EU and outside of EU or if they have a status as a migrant or refugee.

59 Ibid.
60 Ibid, p.81
62 European Commission, Migration and home affairs, “Integration in the labour market”, 2018
63 Christer, Lundh, “Invandringen till Sverige”, Svenska tryckcentralen, the 2005, p.7
3.4 Hypothesis

Based on this theoretical debate, the study has made a causal hypothesis, which entails that *language education will increase the employment rate of immigrants*. Language is crucial for finding employment, and thus there is much emphasis in the language education in the Swedish integration process. This hypothesis is also strongly based on previous research done in Sweden and abroad and specially Helmut Esser’s theory of the importance of language in finding employment.

4. Research Design

In the following section the design of this study will be presented. Firstly, the choice of method is motivated followed by discussion of the selected data. Thereafter the variables, control variables and dummy variables are explained and operationalized. Lastly the validity and reliability of this study will be analyzed as well as other problems and limitations that may occur for this study.

4.1 Choice of Method

To examine the impact of the language education on the employment rate of immigrants, Ordinary Least Square (OLS) regression analyses are used, due to their capacity and strength in finding a correlation between two variables. It is also chosen because of the lack of quantitative research around SFI and immigrant integration. The intention of regression analysis is to find a line which summarizes the relation between variables as reliably as possible, which is very suitable for this study. The aim of this study is to be able to generalize these results, and a quantitative large-N comparison is an optimal way to do it. The whole population is part of the observations meaning that the employment rate of immigrants is measured from all the immigrants who are employed, not just an estimation. The research will be conducted on local level. The analysis is conducted using data from 240 out of 290 municipalities in Sweden, leaving 50 municipalities out of the research because of the lack of data. The amount of observations varies between 953-962 depending on the variables. The data is collected in years 2013-2016. The study has chosen those years because new improved data can be found from Kolada during the period. Kolada has created a new scale of evaluating the SFI language course and they have used data of people who have

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64 Jan Teorell and Torsten Svensson, ”Att fråga och att svara”, Malmö, Liber, 2007, p. 159
65 Christofer Edling, Peter Hedström, ”Kvantitativa metoder”, Studentlitteratur, Lund, 2003, p.87
passed the highest course in students’ own level within two years’ time. This should more reliably answer to the level that the students possess in Swedish, and therefore this study is limited to years between 2013-2016.

A bivariate regression is initially used to understand the relationship between independent variable \textit{language education} and dependent variable \textit{employment rate of immigrants}. However, bivariate regression has difficulty in isolating other variables from the relationship that it measures, therefore this study also uses multivariate regression that includes control variables and dummies.\textsuperscript{66} This enables the study to control the bivariate relationship for other variables and investigate the variation that appears in municipalities as well as broader in Sweden during time.

4.2 Data Selection

The empirical data used in this study is collected from Sweden’s national statistical sites. Data for SFI participation is collected from the Swedish Association of Local Authorities and Regions (SKL) database Kolada. It collects data in the municipality level about resources, volume and quality of institutions.\textsuperscript{67} Data for the employment rate of immigrants, the unemployment of natives and the percentage of immigrants in the municipality is collected from Statistics Sweden (SCB), which is a government agency that brings official statistics to the public.\textsuperscript{68} These are official Swedish sources used in many official reports and are therefore to be considered as reliable.

4.3 Dependent and Independent Variables

\textbf{Independent variable: Language education}

Language education is defined in this study as a process and practice of acquiring a second or foreign language. There is no data on how well immigrants know Swedish language and therefore this study has chosen to use the results in SFI language course as the best option to operationalize the Swedish language education. More closely the percentages of people who pass at least two SFI language courses in their education level will be analyzed. It takes into consideration a timeframe, which is two years, and therefore enables to analyze the people who have taken a pause because of internship or job. Also, because the students can start the course at any time of the year it will not disadvantage those who start the course just before the examination period at the end of the year.\textsuperscript{69}

\textsuperscript{66} Ibid, p.204
\textsuperscript{67} Kommun- och landstingsdatabasen, ”Om Kolada”
\textsuperscript{68} SCB, ”Om Scb”
\textsuperscript{69} SKL, ”Uppföljning av sfi”, 2015
This study is not certain that passing the SFI course increases the Swedish language knowledge, something that will be discussed under validity of the variables. However, the goal of SFI language education is to find employment or start studies. Statistics Sweden states that “Swedish language is an important base for immigrant participation for the society and labor market. SFI course today is one of the most important efforts for immigrants to learn the Swedish language”. Therefore this study assumes that passing the SFI language course increases the level of Swedish.

In Sweden, the budget bill for 2018 introduced an education and training obligation for newly-arrived migrants who are considered in need of further education to find work. The education and training obligation makes it clear that the individual’s responsibility is to obtain the skills necessary to be matched to a job, to take part in labor market policy measures, or continue studying. The percentage of people participating in the SFI language education is still rather low but the improvement which make the SFI education an obligatory part of integration program will likely increase the participation in years to come.

The goal of the Swedish for immigrant course is to learn to read and write Swedish, to be able to speak, have a conversation, listen and understand Swedish in different situations. SFI course is completely free, even books and other means are included. One must be 16 to begin the course, but there is no maximum age. The course is trying to be based on one’s needs and it can be done as an internet course or combined with internships or work. The idea is to create better Swedish skills for labor market participation.

In year 2017, 163 000 students participated in SFI language course. It’s an increase with 8,7 percent compared to year 2016. The amount for students has increased every year in 21\textsuperscript{st} century. The number of students has doubled from year 2007. As it can be seen from figure 4, the percentage of people passing the SFI language course varies, so it is possible to come very close to 100 percent. The course that should have the same content gives a strongly varying percent of people who pass the course. For example, in the municipality of Hallstahammar the percent of immigrants who pass the language education is only three percent whereas the same percent in Bjurholm is 90.

\footnote{SKL, "Nyckeltal med integration i fokus", Advant produktionsbyrå, 2017, p. 19} \footnote{SKL, "Etableringsinsatser och SFI", 2018} \footnote{Utbildningsinfo, "SFI utbildning i svenska för invandrare"} \footnote{Skolverket, "Publikationer"}
municipalities are responsible for organizing the language education but same guidelines should be followed. Further qualitative studies should be done to find the explanation for this phenomenon.

Figure 4: The percentage of students who passed SFI-language course, year 2015

![Percent of students who passed SFI with the highest grade, all municipalities showed on the horizontal axel](image)

Source of data: Kolada

The number of students can have an impact on how many students pass the SFI course. The biggest municipality Stockholm has yearly had 17 000-18 000 enrolled students in the SFI language course between years 2013-2016. In some municipalities, it is only 30 people who participate in the language course. However, this study only analyzes the impact of passing SFI language course to the employment rate. This study will not therefore analyze what are the factors that affect to the passing of the language course.

**Independent variable: employment rate of immigrants**

As a theoretical definition of the employment rate, this study uses OECD’s definition, which states that the employment rate is defined as a measure of the extent to which available labor resources are being used. They are calculated with comparison of the employed to the working age population." The employment rate is operationalized as a percent of foreign-born individuals between ages of 20-64, who are part of the paid labor market, excluding for example people who are not working because of health problems, studying or retired. This is measured by the annual register-based labor market statistics (RAMS) used to describe employment in Sweden. In RAMS, all people who are registered in Sweden on 31th of December receive employment status as either

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OECD, “Employment rate”, 2018
employed or non-employed. Since statistics are aggregated, it is often used to report employment at regional and local level. This calculated threshold should be a level of income, which, as far as possible, corresponds to the ILO definition of employment. People who have income higher than the threshold are assumed to be employed.\textsuperscript{75}

To be classified as an employee, the person must have an income that exceeds a calculated threshold, or declared for active business activity during the current year. This information will be collected from the Swedish Tax Agency. Information from SCB Labor Force Surveys (LFS) and control data is used. The method utilizes the employment situation for the population in the LFS selection in October and November and their total income during the year. The main reference period for employment is November. To consider salary differences that depend on age, sex and what period of the year the income refers, the population is divided into 24 different groups, giving them different threshold values.\textsuperscript{76}

There are risks for wrong classification. Some smaller groups and people with a weak connection to the labor market are at risk of weaker quality in employment variable at the employment status. This applies primarily to persons aged 16-19 and pensioners. In regions bordering to other countries, there is a risk that real employment in the population is underestimated since RAMS only includes data on salary paid in Sweden.\textsuperscript{77}

4.3 Control Variables

Control variables are included in the study to receive more reliable results. The figure below visualizes how the variables unemployment rate and foreign-born percentage can affect the relationship between language education and the employment rate of immigrants and will be therefore controlled.

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\textsuperscript{75} SCB, "Förvarvsabete – Ett sysselsättningbegrepp"
\textsuperscript{76} Ibid.
\textsuperscript{77} Ibid.
Unemployment rate

The unemployment rate is commonly defined as percent of people who do not have a job, are actively looking for work, and are currently available for work, as also stated by SCB. The unemployment rate of native-born individuals is chosen as a control variable as it can affect the relationship between the language education and the employment rate of immigrants. The data of the employment rate of native-born individuals is chosen instead of the overall unemployment rate to avoid including unemployed immigrants into both groups. The variable is also chosen as based on Lundh analysis on the causes of insufficient integration. The data is collected directly from SCB. The labor market situation affects the employment rate of immigrants. The high unemployment rate of native-born individuals in the municipality affects the unemployment of the immigrants as well. The unemployment rate is operationalized as unemployment rate of the natives in the municipality. More closely native-born people between ages 20-64, who could work but are not employed. People who are unemployed need also to be actively seeking for a job. It also includes people who have already found employment, which starts within three months, but cannot start working yet, even if they could. High unemployment rate can be a result from bad economic situation in the municipality, Sweden or in the world.

The percentage of foreign-born individuals

The percentage of foreign-born individuals is defined as the percent of individuals born outside of Sweden compared to the native population. The percentage of immigrants in the municipality will be controlled because it can affect the passing of the SFI course and the employment rate of immigrants. The statistics are from SCB and it is measured as foreign-born people between ages 18-64. The reason to control this variable is also based on Lundh’s hypothesis presented in the introduction and further discussed by Björklund. A big number of immigrants can affect the employment rate differently. The higher number of immigrants can have a negative impact on the employment rate if the labor market is not suitable for many immigrants. Lundh’s also states that unsuccessful integration can be a cause of the Swedish institutions not working properly. In that situation, the increased number of immigrants makes it even harder for the institutions to work properly and guarantee employment. Björklund et al. also explain that the high percentage of

78 SCB, ”Arbetslöshet i Sverige”, 2018
79 Christer, Lundh, ”Invandringen till Sverige”, Svenska tryckcentralen, the 2005, p. 70
80 SCB, ”Arbetslöshet i Sverige”, 2018
81 Ibid.
82 Christer, Lundh, ”Invandringen till Sverige”, Svenska tryckcentralen, the 2005, p. 78
immigrants in the municipality can be caused from the housing segregation, which further leads to lower integration and the language learning possibilities as the immigrants don’t get in touch with the natives. However, the higher number of immigrants in the municipalities can also lead to higher employment rate. The municipality may be more prone to having immigrants and finding jobs for them, so the institutions and labor market would be suitable for immigrants, as stated by Christer. In addition, as shown by Christer and Björklund, having “a network” is important in labor market integration, and the higher number of immigrants can guarantee a better network for them. Lastly, stated by Christer and Björklund “the ethnic discrimination” which one the factor affecting to insufficient labor market integration, is probably lesser in the regions with more immigrants.

**Municipality and year dummies**

Lastly dummy variables for both years and municipalities are made. Dummy variables for municipalities capture what is constant within municipalities. For example, if one municipality would have high employment rate and low percentage of people who pass SFI during this study’s time period it will be controlled. The percentage of immigrants in the municipalities and the percentage of immigrants who pass the SFI varies over time and therefore it is convenient to control for other variables that are constant in the municipalities. To be able to find out that it is the language education that affects the employment rate of immigrants, other variables that differ in the municipalities should be controlled. Dummy variables for years are included to capture the influence of aggregate trends and to control for the year effect. This will control for the rising number of aggregate variables such as economic depression only affecting to certain years. Economic depression and booms are affecting both the participation in SFI-course and employment rate and therefore it is important to control that. In this study, it is very relevant to control for the year effect so that the big sample does not generate significant results just because there is a large amount of observations. This is even good reason to use dummies within the municipalities since 240 municipalities are included in the study.

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84 Ibid.
85 Christer, Lundh, ”Invandringen till Sverige”, Svenska trycecentralen, the 2005, p. 75
86 Ibid., p.76
4.4 Problems and Limitations

While using linear regression it is important to notice its faults. The weakness of regression is that it is not able to say that SFI-score affects the employment rate of immigrants, because it can also be the other way around. This method can only show that there is covariation not causality.\textsuperscript{88} If immigrants find jobs it also increases their Swedish knowledge and therefore increases the possibility to succeed in the SFI language course. However, this study is interested in the linkage between those two variables. Also, in Sweden like in other countries it is hard to find employment without the knowledge of Swedish. Previous theories and research presented in this paper have showed that it is the language knowledge that increases the employment opportunities, not the other way around.

This method also makes certain assumptions in variables. While analyzing the percentage of people passing the SFI course, we are expecting that it increases their knowledge in Swedish. This study has not done research about the quality of SFI and it does not analyze how hard or easy it is to pass the course. It is not certain that if one passes the beginners class it leads to increased Swedish knowledge. There are no better measurements of the language knowledge of the immigrants for large-N study but maybe in more qualitative study the actual effect of SFI could be analyzed.

Linear regression also assumes that the data is independent. That means that the scores of one subject has nothing to do with those of another.\textsuperscript{89} However, this is not always the case. For example, the employment rate of one municipality can affect the employment rate of the neighboring municipalities. If, for example a factory is closed in one municipality, the worker might try to find employment in neighboring municipalities.

4.5 Validity and Reliability

It is important to analyze the validity and reliability of this research. The validity is defined as the extent to which a concept is accurately measured in a quantitative study.\textsuperscript{90} In this study, the language education is operationalized as passing the SFI course. As discussed above, it is not certain that immigrants know the Swedish language even if they pass the language course. It should be noted that even if one passes a course it does not necessarily mean that their Swedish knowledge is high.

\textsuperscript{88} Jan Teorell and Torsten Svensson, ”Att fråga och att svara”, Malmö, Liber, 2007, p. 171
\textsuperscript{89} Sciencing, “The disadvantage of linear regression”, 2018
enough to work as a marketing officer or to be able to write long political reportages in Swedish, something that can be required for certain jobs. Two people can pass the exact same course, and the other one can speak Swedish well and the other one is maybe better at writing. However, the goal of the SFI language education is to find employment or start studies and there is no better measurement of the language knowledge. This study assumes that the passing of the language course increases the skills in Swedish required for finding a job, because it is the goal of the course. This study uses also new dataset from Kolada, which was changed in 2013 to get more valid results.

The data for the unemployment rate of native-born individuals is directly collected from SCB, which states that people who don’t work even if they could work are counted as unemployed. They also state that even full-time students who are actively seeking for job can be counted as unemployed, if they don’t find a job. This raises some questions of the validity, because a full-time student should not be part of the group of unemployed. Nevertheless, without counting this error the validity of the unemployment rate is high. The employment rate for immigrants is also directly collected from SCB, but it raises more questions of the validity. One could argue that the threshold percent, created by SCB to calculate whether one is working or not is too high or too low. There is no data available on how the threshold percent is calculated and whether it is accurate or not. It could potentially lead to higher or lower employment rates than the actual employment rate is. A Better data could be found for example from the tax reports, which would show if people have earned enough money to be called as employed. The threshold percent is created on the similar basis, but it is not possible to evaluate the percent, when the information is not public.

Lastly this study measures the percent of foreign-born individuals in the municipalities. This data is also directly collected from SCB, which is a trustworthy source. The only misclassification here could be that there are maybe more foreign-born people than is registered in the database, for example people who are illegally here or have not received their status yet. However, this group is marginalized and won’t affect the validity of the results.

Reliability relates to the consistency of a measure. It should be the absence of accidental mistakes, for example when collecting data. The result should be the same if someone else makes the same statistical calculations in this case. Data for this study is taken from trustworthy sources and the data is collected two times to avoid mistakes. Therefore, there is a good assumption to believe that

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91 SCB, Arbetslöshet i Sverige,
92 Ibid, p.64
the same result would be reached with other person making the statistical calculations. Together good reliability and good validity should make the results of this study valid.

5. Results and Analysis

In the next section the results followed by discussion will be presented. To start with, the descriptive statistics will be presented, enabling a better understanding of the variables presented above. Furthermore, bivariate and multivariate regressions will be presented and the reasons for the results will be analyzed.

5.1 Descriptive Statistics

Table 1 summarizes the descriptive statistics for each variable used in the regression. The statistics show that the average for the dependent variable: employment rate for immigrants, is 56 percent during years 2013-2016. The average is rather low. There is variation between the values since the minimum is 33.3 percent and the maximum is 77.8 percent. The independent variable: the percentage of immigrants who pass the language course has an average of 51 percent. The SFI score, which means the percent of people passing the SFI course as explained earlier, has very large variation between 3 and 92 percent. Descriptive statistics also show that there are no extreme values that would make the results of this study invalid and giver better understanding of the coefficients calculated in the linear regressions.

Table 1. Descriptive statistics, measured in percent.

<table>
<thead>
<tr>
<th>DESCRIPTIVE STATISTICS</th>
<th>N</th>
<th>MEDIAN</th>
<th>MEAN</th>
<th>STD. DV.</th>
<th>MIN</th>
<th>MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMPLOYMENT RATE</td>
<td>1152</td>
<td>56</td>
<td>56.4</td>
<td>8.94</td>
<td>33.3</td>
<td>77.8</td>
</tr>
<tr>
<td>SFI SCORE</td>
<td>962</td>
<td>50</td>
<td>51</td>
<td>13.55</td>
<td>3</td>
<td>92</td>
</tr>
<tr>
<td>UNEMPLOYMENT RATE</td>
<td>1136</td>
<td>6.1</td>
<td>6.2</td>
<td>1.66</td>
<td>2.5</td>
<td>13</td>
</tr>
<tr>
<td>FOREIGN-BORN PERCENTAGE</td>
<td>1152</td>
<td>14</td>
<td>15.8</td>
<td>7.2</td>
<td>4.8</td>
<td>52.4</td>
</tr>
</tbody>
</table>

5.2 Regression Analysis

Before showing the results of the study, figure 5 is presented, which shows a scatterplot of the regression between the employment rate of immigrants and the passing of the SFI course. Graph presents the weak negative relationship between the two variables. It also shows that the observations are rather concentrated and not widely spread around the line.
Table 2 shows the relationship between passing the SFI language course (SFI score) and immigrants employment rate between years 2013-2016. The linear regression is calculated in three different categories. In the first model, only bivariate regression is made between independent variable: passing the SFI language course and the dependent variable: employment rate of immigrants. There is statistically significant correlation, which can be interpret as followed: when the percentage of people passing the SFI language course increases by one percentage unit, the employment rate decreases by 0.067 percentage unit. Against the previous studies and the theories presented above, the passing of language course, which should lead to better knowledge of the Swedish language leads to decreased employment rate. The second model controls for the unemployment rate in the municipality for the native-born people. The result is still negative and statistically significant but the correlation is a bit lower -0.062. The third model controls for the unemployment rate and the percent of foreign-born people in the municipalities. The correlation is once again negative and statistically significant but the coefficient is even lower. When the percent of people who pass the SFI language course increases with one percentage unit the employment rate decreases by 0.057 percent unit when the unemployment rate and the percentage of foreign-born people are controlled. The last result is the most interesting for this study because the two affecting variables are controlled but there is still significant negative correlation between passing the SFI course and the employment rate of immigrants.

Standard error of the first model is 0.021, in the second and in the third model which control for foreign-born percentage and unemployment it is 0.017. When comparing with the coefficients, the standard error is relatively small, which means that results are quite precise. However, R-squared in the first model is only 0.01, in the second it is 0.35 and the third model it is 0.36. Thus, the first
model explains only 1 percent of variation in the dependent variables’ total variation, when adding control variables, the percent of explained variation increases to over 30 percent.

Even though the results presented in table 2 are statistically significant, it does not mean that all the important variables would be controlled, or that this study would have found causality. It does not either mean that the results would be “substantially significant” or interesting. The significance can be measured in two ways. Firstly, it can be compared to previous studies. Secondly, the results can be compared with the independent variables’ average. To be able to show a negative correlation between employment rate and language education is rather significant compared to earlier studies. There have not been studies that would be able to show this negative correlation. As shown in the previous research discussed in this study, there has only been evidence that the language education increases the employment rate, for example in the study done by Abdelkerim and Grace in Australian communities. Also, Sweden has a clear focus on language education as part of the labor market integration. Compared to previous studies, these results are rather interesting and politically important. Secondly, the significance can be measured by comparing the coefficient with the average in SFI score, which is 51. In this comparison, there decrease of 0.057 shows a quite small effect when comparing with the average of the SFI. In this comparison, the result may not be very significant.

Table 2: The impact of passing SFI course on the employment rate in 2013-2016.

<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>Immigrants employment rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>SFI score</td>
<td>-0.067***</td>
</tr>
<tr>
<td></td>
<td>(0.021)</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>-3.161***</td>
</tr>
<tr>
<td></td>
<td>(0.140)</td>
</tr>
<tr>
<td>Foreign-born percentage</td>
<td>0.045</td>
</tr>
<tr>
<td>Constant</td>
<td>59.451***</td>
</tr>
<tr>
<td></td>
<td>(1.102)</td>
</tr>
<tr>
<td>Observations</td>
<td>962</td>
</tr>
<tr>
<td>R²</td>
<td>0.011</td>
</tr>
<tr>
<td>Residual Std. Error</td>
<td>8.771 (df = 960)</td>
</tr>
</tbody>
</table>

Note: Standard errors in parentheses. * p < 0.1; ** p < 0.05; *** p < 0.01.
Breusch-Pagan test is done to test the heteroscedasticity of the result. The test gives a p-value, which is 1.206e-06. The small p-value means that this study can reject the null hypothesis with high probability, which leads to a fact that this result suffers from heteroscedasticity. There are means to handle the problem of heteroscedasticity, but dummy variables will be first included to see if this study further receives a negative result before dismissing the heteroscedasticity.

There are three possibilities for this result. Firstly, students participating in the SFI language course do not learn the Swedish language adequately. It means that even if the immigrants pass the language course in the period of two years, their language knowledge is not sufficient enough for finding employment. As shown previously there are studies that question the quality of SFI based on underqualified teachers and full classrooms. This study has not focused on the quality of SFI course and more qualitative studies would be needed to examine the quality of SFI education. However, in research done by Sweco in Stockholm region, 55% percent of the participants experienced that it was easier to find employment after completing the SFI language course.93

Secondly, this result could indicate that the knowledge of Swedish language does not help the immigrants in finding a job. While analyzing this result in the light of previous studies presented above, it is not very credible that the knowledge of Swedish language would not help in the labor market integration. Essers’ theory makes a clear statement that learning the local language increases the possibilities for finding employment, which is also further addressed by Christer Lundh, professor of economic history. However, it is hard to find research and statistical proof of how the knowledge in local language helps immigrants in finding employment in Sweden. In a globalized world, the knowledge of Swedish language may not be as important as it used to be. There are jobs that can be managed only with the knowledge of English. Especially low wage jobs, that do not require communication or coordination, can be managed with no or little knowledge of the local language.94 Immigrants are overrepresented in the branches of industry, restaurant and hotel branch, where knowledge of the local language is not as important and the wages are lower.95 Esser further states in his research that especially skills in the local language are required while trying to find a better job and higher income.96 It is possible that immigrants who are fluent in Swedish try to find academic work, but while there is more competition about these jobs, they are harder to

93 Storstockholm; Vuxenutbildning, 2017,  
94 Hartmut, Esser, “Migration, language and integration”, AKI Research Review 4, Social Science Research Center Berlin; 2006, p. IV  
95 Christer, Lundh, “Invandringen till Sverige”, Svenska tryckcentralen, the 2005, p.69  
96 Ibid.
achieve, resulting in unemployment because of the Swedish knowledge. Another explanation could be that the students who pass the language course are the ones, who are not actively seeking for a job or working. They have focused on the course too much, while they should have been acquiring jobs simultaneously. Those who do not pass the language course could be the ones who are for example working during the language course and do not have so much time to put in the course, something called as reverse causation.

A third explanation could be that there are other factors in the municipality or in the year level, that explain this relationship. Neither of the explanations above seemed reliable when analyzing why higher language education would lead to lower employment rate of immigrants, therefore, to further analyze this negative result, two dummy variables are created. The first dummy variable controls for the differences in years. It captures the influence of time-based trends which can affect the result of regression analysis, as explained earlier, and is therefore controlled. These results are presented in the table 3, which shows how the relationship between passing the SFI course and the employment rate is still negative and significant (-0.056). As the results show the years do not affect the results. If there would be a lot of variation between the years in Sweden in general, the results could be affected by that. Possible explanations for variation could be economic booms and depression. Employment and unemployment are highly dependable of the economic situation in the labor market.

The second dummy variable is made for the municipalities, which controls everything that is constant in the municipalities during the time period of this study. The regression can suffer from bias because some variables may be left out form regression. For example, the quality of the SFI course can be weak in some municipalities throughout the time and therefore affecting the employment rate and the language learning. The results are presented in the table 4, which shows that when the percent of people who pass the SFI course increases with one percentage unit, the employment rate decreases by 0.011 percentage unit. This implies that the statistically significant result in the table 2 and 3, is not anymore statistically significant while including the municipality dummies. This signifies that there is something in the municipality level that affects both the employment rate of immigrants and to the passing of the SFI course, therefore the decrease in the employment rate cannot be explained by passing the SFI course, but with differences between municipalities.
There are other factors in the municipalities that affect immigrants’ labor market integration and passing the SFI course. Based on the theory of this study presented above, these factors could be educational background, time spent in Sweden, or the quality of the employment service and the SFI course. What is still interesting for this study is that based on all the theories, previous studies and after analyzing four years with 958 observations, a positive covariation between passing the SFI course and the employment rate was expected. However, it is important to remember that a non-significant result doesn’t mean that the relationship between two variables would be zero. It only means that this study cannot disregard the possibility that the passing of the SFI course has no relationship with the employment rate of immigrants. Having said that, if there cannot be seen a covariation between those two variables after controlling the differences in municipalities over time, it can be lightly questioned whether passing the SFI course increases the employment rate. In average, it might not be crucial in the municipal level to pass the SFI course to find employment, but at individual level for some people it can be very important. What can also be an explanation is that this study only analyzed a time period of four years and if there was not enough variation in this time in order to municipality dummies to work properly, this could lead to disappearance of statistically significant results.

Table 3. The relationship between passing the SFI course and the employment rate, with year dummies.

<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>Immigrants employment rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFI score</td>
<td>-0.056***</td>
</tr>
<tr>
<td></td>
<td>(0.017)</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>-3.225***</td>
</tr>
<tr>
<td></td>
<td>(0.141)</td>
</tr>
<tr>
<td>Foreign-born percentage</td>
<td>0.053*</td>
</tr>
<tr>
<td></td>
<td>(0.032)</td>
</tr>
<tr>
<td>Constant</td>
<td>79.099***</td>
</tr>
<tr>
<td></td>
<td>(1.527)</td>
</tr>
<tr>
<td>Observations</td>
<td>953</td>
</tr>
<tr>
<td>R²</td>
<td>0.364</td>
</tr>
<tr>
<td>Residual Std. Error</td>
<td>7.051 (df = 946)</td>
</tr>
</tbody>
</table>

Note: Standard errors in parentheses. * p < 0.1; ** p < 0.05; *** p < 0.01.

97 Pär Nyman, Marcus Österman, “Att genomföra och bedöma statistiska undersökningar”, 2016, p.15
Table 4. The relationship between passing the SFI course and the employment rate, with municipality dummies.

<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>Immigrants employment rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFI score</td>
<td>-0.011 (0.009)</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>-0.423*** (0.158)</td>
</tr>
<tr>
<td>Foreign-born percentage</td>
<td>-0.298*** (0.055)</td>
</tr>
<tr>
<td>Constant</td>
<td>78.684*** (1.840)</td>
</tr>
</tbody>
</table>

Observations 953, R² 0.959, Residual Std. Error 2.081 (df = 694).

*Note:* Standard errors in parentheses. * p < 0.1; ** p < 0.05; *** p < 0.01.

While table 4 does not give significant results anymore it is important to analyze the table carefully. Standard error in the table 4 is 0.01, and when compared to coefficient -0.01, the difference between standard error and coefficient is rather small, resulting in a quite strong standard error. While the standard error explains how precise the result is, this result remains rather unprecise. What should be however noted is that the municipality dummies capture a lot of variation in the data, which often leads standard errors being larger. The standard error in the table 3 is lower, which gives more precise results. The fixed effects in the table 3 are only for four years, instead of 240 municipalities, which seems reasonable.

R-squared in the table 3 is only 0.36 but in the table 4 with municipality dummies it is 0.96, which means that the coefficient can only explain 36 percent of the variation in the passing of the SFI course in the table 3, but 96 percent of the variation in the table 4. The result is consistent, when the R-squared increases whereas the number of control variables increases. Adjusted R-squared does not greatly differ from the R-squared and therefore the result will not be analyzed in this study.

Another interesting fact in the results is that when the number of foreign-born individuals increases by one percentage unit, the employment rate of the immigrants decreases with 0.3 percentage unit. This result is statistically significant with a low standard error and a high R-squared with control variables and municipality dummies. This study could not prove the relationship between SFI language course and employment rate. But the percentage of immigrants is affecting negatively to the employment rate, something that in the light of the theory could have also been other way around. This could be an important finding for further studies in the field of settlement of
immigrants and the housing segregation. The statistics form SCB shows that immigrants are more concentrated in some areas usually big cities and this could therefore be one explanation why the language education does not help immigrants in finding employment.

6. Discussion of Opportunities for Improvement

There is always some room for improvements. On top of those remarks that were made while discussing the disadvantages of the research method, there are three elements of this study that could have been better noticed and analyzed. Firstly, there are always more variables to control. This study notes that there are other things than unemployment rate and percent of immigrants in the municipality that affects to the study. Time spent in Sweden and middle age could be controlled. Immigrants have a lower middle age, so it could make the results even more significant. Time spent in Sweden affects to both the employment rate and the level of Swedish knowledge.

Secondly, more independent variables should be tested to find out what is affecting to the lower employment rate of immigrants. This study could not show that passing the SFI course would have an effect to immigrants’ employment rate, but other relevant variables which could be tested are the educational background and the quality of the employment service. Finally, what is important to note here is that this study does not know if the people who passed the SFI course are the ones who found employment. Individual data should be analyzed to find out if those people who passed the SFI language in fact found employment or not. More comprehensive qualitative studies on the effects of the SFI course to the employment rate should be carried out. However, as the sample of this study is large, it should therefore give quite accurate results whether SFI increases the employment rate or not. The gap that exists between native-born and foreign-born individuals is not only affecting the society, but is a political problem that needs more attention. More studies in the subject are needed to find out what is affecting the low employment rate of immigrants.

7. Conclusion

To conclude, even though theories and research indicate that language education increases the employment rate of the immigrants, this research could not find this correlation in Swedish municipalities. Surprisingly, this research showed the opposite result, that when the number of immigrants passing the SFI course decreased by one percentage unit, the employment rate for

98 Christer, Lundh, “Invandringen till Sverige”, Svenska tryckcentralen, the 2005, p.62
immigrants decreased by 0.052 percentage unit when the unemployment rate of natives and the percentage of immigrants in the municipality was controlled. When making dummy variables for municipalities to diminish what is constant during time, this study sees no significant relationship between passing the SFI language course and the employment rate. This would indicate that there are other variables in the municipality level that are affecting to the passing of the SFI course and the employment rate of immigrants. However, based on the previous research and theories, positive correlation between language education and the employment rate of immigrants was expected. The non-significant result does not mean that those two variables are not connected at all. However, this leads to questioning both the quality and the importance of the Swedish for immigrants’ course. While SKL states that SFI is one of the most important parts of the integration process, this result is politically rather significant.99

This research contributes to the academic field of research in many ways. Firstly, there has not been a lot of quantitative research in the field of immigrant integration. Even though this study was not able to show what is affecting the lower employment rate of immigrants, hopefully it would increase the interest in the topic, and encourage other researchers to study what is affecting the lower employment rate of immigrants. The importance of SFI is also presented in different sources but actual results of the increased employment are difficult to discover. More qualitative research of the quality and importance of SFI is needed. The question is highly actual and relevant to solve and the lower employment rate of immigrants is affecting the whole Swedish society. After further studies in the field of immigration, more political measures should be made to close the gap for native-born and foreign-born workers. Another relevant result of this study was that the number of immigrants in the municipality is affecting negatively to the employment rate of immigrants. This result is something that should be noted while discussing of the housing segregation and placements of immigrants. To further gain more accurate results in the field of low labor market integration of immigrants, more variables in the municipality level should be analyzed. There are other factors that can have an impact to the employment rate of immigrants, such as their educational background, labor market situation and the middle age. Also, the quality of the employment services in municipalities have an important role in finding employment. More research in the field of SFI and the employment rate in Swedish municipalities is encouraged to be carried out.

99 SKL, 2017, ”Nyckeltal med integration i fokus”, Advant produktionsbyrå, p. 19
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