The Relationship Between Migrants, Education, and Income in the EU

WenDi Jiang

Suffolk University

May 3, 2020

EC-490

Dr. Jonathan Haughton

Contents

Abstract 2
Introduction 3
Literature Review 4
Immigrant and Refugee Employment 4
Immigrant Integration 6
Immigrant and Refugee Employment and Earnings 7
Second Generation Migrants 8
Policy Responses to Immigrant influx 8
Data 9
Methods 10
Findings 11
Intra-EU migrants and the Schengen Area 15
Refugee immigration 16
Hopes are on higher educated second-generation migrants? 17
Discussion 17
Welcoming Refugees to Increase Working Population in the EU 17
Integration and Its Costs 18
Policy Implications 19
Limitations 20
Conclusion 21
Works Cited 22

Abstract

The European nations are currently facing one of the biggest challenges to their society since the end of World War II: Aging. While the rest of the world will also be facing this issue, it is the European societies that are the first to face this challenge and must find a sustainable solution fast. Among the choices of solutions are immigration, Universal Basic Income (UBI), and raising the retirement age. This paper aims to explore immigration as a solution to solve the problems that an aging society faces by looking into the earning power of migrants through their education and region of origin. Using 24,576 observations from the European Quality of Life Survey of 2016, I will use a modified Mincer earnings function measuring PPP equivalized household monthly income as a function of age, education status, and migrant status, as well as health. This will provide valuable insight into immigration and could delineate which types of immigration could be beneficial to an aging society that aims to increase its working-age population.

*This paper aims to only look at refugee immigration from a ***purely*** economic standpoint. It does not aim to justify or refute any policies for or against humanitarian migration.

Introduction

Aging societies will see a shrinking working population, who are then tasked to support an expanding population that is dependent on those in the work force for social security and welfare, resulting in potentially lower tax revenue to support welfare and social benefits. For many European nations, raising tax rates is not a solution because many of them, especially Nordic nations, are already seeing high tax rates that push against the barriers of revenue maximization. In addition, cutting the social security and welfare that are already in place is political suicide. It then leads them to potential solutions such as, but not limited to: universal basic income, immigration, raising the retirement age, and in the future, automation. During 2011-2017, about 68% of recent asylum applicants in the European Union (EU) were aged 18-34, and those admitted do not differ much from that number (OECD, 2018, p.130). The largest flow of recent immigration happened in 2015, during the European migrant crisis, which saw European nations receive over 4 million asylum applications from 2014 to the end of 2017. Among the Syrian asylum seekers who recently arrived in Norway, 67% were without an "upper secondary education" (Statistics Norway, 2018). The goal of immigration as a policy to increase working age population should be to welcome those who can at least replace the native-born population in earnings power (i.e. Earn nearly as much or more than the native-born population with similar socioeconomic characteristics could). This paper aims to analyze the earnings power of migrants by their education status and where they are from (EU nations or non-EU nations), with a focus on first-generation migrants. One limit to this paper is that the data used does not show how long has the migrant stayed in the country they currently reside.

Hypothesis #1: Th native-born higher educated population receives the highest income.

One would expect the more familiar a person is to a country's culture and language, the better integrated they are. The group that is perhaps best integrated in a society is arguably the native-born population. Among this group of people, the expected correlation between education and earnings applies. Thus, it is hypothesized that native-born population with higher education are the highest earners.

Hypothesis #2: Migrants who received higher education have higher earning power in host countries than migrants who did not receive higher education.

When looking at migrants, the relationship between education and earnings power also applies. Even if neither group of migrants are well integrated society, I hypothesize that migrants with higher education will earn more in host countries than migrants who does not have higher education.

Literature Review

Immigrant and Refugee Employment

In OECD's 2018 International Migration Outlook report, it is noted that the recent increase in labor force in the EU through the influx of working age population during the European migrant crisis will result in higher unemployment rates. It is found that initially the labor force participation rate of refugees is "typically very low in early period of their stay in host nation" (p.14). The result is that before "gainful employment is obtained, a significant portion of refugees will continue to be dependent on the welfare systems of host countries." (p.130). This is true even from historical data: Olsen found that only 48% of refugees that settled in Norway since 1986 (to 2004) are in the labor force, while the total population labor force participation rate was 70% (Olsen, 2004, p.73). The impact on the labor market of the recent influx of migrants could be negative, especially when the migrants compete for the same jobs as

the native-born population. This impact is expected to be higher in countries that took in relatively the most migrants, such as Austria, Greece and Sweden, and Germany. (OECD, 2018).

Furthermore, Djuve and Hagen (1995) also found consistently low employment figures among migrants in Norway: Non-Western migrants perform worse on several indicators of wellbeing, and their unemployment rates are higher, and standards of living tends to be lower. It should be noted though, that before 2004, Norway did not have a two-year compulsory introduction and integration program for refugees. In 1990-2013 Finnish data, the average time for migrants from non-OECD countries to score their first employment ranges from 2.3 years (Turkish migrants) to 5.6 years (Somali migrants), while migrants from within OECD nations score their first employment typically within a year (Sarvimäki, 2017). In Finland, the employment rates of Iraqi, Afghan, and Somali migrants/refugees residing there rose to roughly 20-26% by 2013, and migrants/refugees from the former USSR, former Yugoslavia, Turkey, and other OECD countries residing in Finland "stabilized at 52-58 percent" by 2013 (Sarvimäki, 2017).

Nieto, Matano, and Ramos (2015) found, using probit models, that migrants are more likely to be skill mismatched than native-born population. The difference is much larger for vertical mismatch (education), wherein the difference is higher for migrants coming from non-EU countries than for those coming from other EU countries. The authors find that migrants from non-EU countries are less valued in EU labor markets than the native-born population with similar characteristics – a result that is not observed for migrants from EU countries. In addition, empirical evidence from history in Chiswick (1978, 1979) and Borjas's research (1990, 1994) shows that migrants are likely to earn wages lower than that of native-born population with

similar socioeconomic characteristics and ability, consistent with Nieto, Matano, and Ramos's probit model research mentioned above.

Immigrant Integration

Kogan (2016), using EULFS 2008 microlevel data, found that migrants who receive labor market counseling tend to be less educated and less proficient in the host country language – and hence overall somewhat more negatively selected for labor market success than those who do not participate in labor market training.

In most of the countries Kogan studied, the higher the level of education, the lower the propensity to pursue labor market counseling. Kogan also found that there are contradicting trends on migrants' occupational status and their participation in training: In Netherlands, migrants who acquired labor market training have lower occupational status (low skilled), versus Italy where those who received training have "advantageous occupational status" (2016, p.351).

Migrants who participated in labor market counseling see higher unemployment rates in Ireland, and the UK, and lower occupational status in Netherlands and UK. This is most likely due to self-selection: migrants who seek labor market counseling are more likely those who are having difficulty finding employment than migrants who do not seek labor market counseling. But in the aggregate, Kogan's research shows that "neither labor market training nor labor market counseling" (p.351) produces better labor market outcomes for the migrants.

Different from labor market integration, which is found to be independent of immigration levels, social integration of refugees/migrants can become troublesome as the number of migrants from one area (a country) increases (Contucci & Sandell, 2015). This is because of social network effect. Contucci and Sandell (2015) believe that it "undermines the strategy of reliance on

increasing immigration to secure future economic well-being that many governments and international organizations are in the process of adopting" (p.1272). Social integration of migrants becomes "seriously delayed" (p.1272) as the number of migrants rise, especially if they share the same culture or country of origin. The migrants that Europe received during the peak of the migrant crisis were predominately Syrian, and Afghan (Clayton & Holland, 2015), and due to expected family reunification, the migrant numbers are expected to increase (OECD, 2018), potentially adding more complication and difficulty to social integration of these migrants.

Immigrant and Refugee Employment and Earnings

Through Statistics Finland's combined data of "annual information on country of birth, mother tongue, nationality, family structure, employment and income for the entire working age population living in Finland" (p.8), Matti Sarvimäki (2017) found that from 1990-2013, many of the migrants from the Middle East living in Finland fared worse on employment and earnings than migrants from the former USSR and other OECD nations.

Sarvimäki constructed time series plots of the earnings, employment rates, and benefits received for these groups of migrants (from Iraq, Afghanistan, the former Yugoslavia, and former USSR, Turkey, and other OECD nations), and compared them to the values for native-born population. Over time, this immigrant and native-born population earnings and employment gap decreases but remains large: after 10 years of arrival, the average earnings of Iraqi men were still "less than a quarter of the average earning of same-age native men." (p.1). Similar results were seen in men born in Afghanistan and Somalia, although they see slightly faster earnings growth than Iraqis. Among women, the difference in income between migrants of different nationalities is found to be even larger than that of men. Furthermore, migrants from

Afghanistan, Iraq and Somalia on average receive twice as much benefits as the native-born population receives. (Sarvimäki, 2017).

Second Generation Migrants

Statistics from The EU in 2014 show that on average, second-generation migrants have a higher tertiary education attainment than the native-born population (Eurostat, 2016). This data varies across nations: in Portugal, Cyprus, Malta, Hungary, UK and Italy, a higher percentage of second-generation migrants aged 25-54 attained tertiary education compared to the native-born population, while Finland, Belgium, Luxembourg, and the Czech Republic see a lower percentage of tertiary education attainment in second generation migrant compared to the native-born population (Eurostat, 2016). But it is argued that second generation migrants may see different outcomes for integration depending on their socioeconomic characteristics: upward/downward mobility and combined with biculturalism. (Portes & Rumbaut, 2001; Portes & Zhou, 1993).

Policy Responses to Immigrant influx

Hernes (2018) argued that the immigration policies of Scandinavian nations have gone towards a more restrictive direction.

Sweden, arguably one of the most liberal of them all, announced in 2015 a decision to restrict entry of new arrivals and to shift a permanent residence to a temporary one as well as introducing stricter self-sufficiency rules for those who wish to seek permanent residence and family reunification (Hagelund, 2020). This decision by the Swedish government largely ties the success of obtaining a permanent residency to labor market success.

Sweden's Nordic neighbor, **Finland**, responded to the 2015 influx of migrants by increasing the asylum processing capacity *and* tightening the asylum policy itself to "make Finland a less attractive destination" (Sarvimäki, 2017, p.7). Newer rules also required that refugees could apply for family reunification *only* if they had sufficient income. Like Norway did in 2004, Finland chose to improve its integration services in 2016 by streamlining the inception of integration services; improve the recognition of education obtained abroad; and integrate language requirements into other studies (Sarvimäki, 2017).

In the European Union, French President Macron and the European Commission advocated for a policy of stopping migrants *before* they reach the European border, but Europe has yet to make a response. In addition, due to a lack of common asylum policy, each European country has been making their own decisions based on their own laws and their interpretations of the UN Charter (Kyriakopoulos, 2019).

Data

The data used in this research is the 2016 European Quality of Life Survey, conducted in EU28 nations and a few others, which includes household earnings equivalized in PPP, respondent age, respondent sex, respondent health status dummy, respondent risk of depression dummy, respondent immigration status, country where the survey was conducted, and respondent education level dummy. One severe limitation of the dataset is that it does not denote whether an immigrant was a refugee. Through research already conducted by others, I extrapolated the fact that most refugees that came to Europe during the migrant crisis do not possess high education degrees, to estimate what the earnings power of a "typical" refugee.

Summary Statistics

Average Age	52	
Male	43%	
Female	57%	
Born in EU	28,931	**90.1%**
First Gen Migrant	3,185	**9.9%**
First Gen EU Migrant	1,434	**4.5%**
First Gen Non-EU Migrant	1,751	**5.5%**
Second Gen Migrant	2,137	**6.7%**
Average Equivalised Income	€ 1,343	
Higher Education Attainment	27.87%	
Average Adults in Household	2	
Average Housheold Size	2.4	

Somethings to note is that the higher education attainment percentage in this survey is lower than the EU average of 39.1% in 2016 (European Commission, 2017). The male to female ration in the EU is also higher: about 49% male and 51% female (The World Bank, 2019).

Methods

To obtain per capita earnings data, I generated a variable called “percapinc” by dividing the PPP equivalized household earnings by the number of people in the household.

Then I used a modified Mincer earning’s function to calculate the effects of immigration and education status on the respondent’s per capita household earnings. In the regression, I included age, age squared, migrant status tabbed with education status, bad health dummy, risk of depression dummy, respondent sex, and country where the survey was conducted. I regressed the dependent variable (“percapinc”) on the independent variables to identify any statistically

significant relationships between them. These relationships are tested based on a 95% confidence interval with an alpha level of 0.05.

Findings

Number of Obs.	**24,576**		**α = 0.05**
R-Squared	**0.0984**		
Adj R-Squared	**0.097**		
	Coef.	t	p>|t|
percapinc			
=			
Age	3.389	1.85	0.064
Age^2	0.232	1.34	0.180
First-Gen EU migrant Higher Education	**366.166**	**8.62**	**0.000**
Native-Born Higher Education	**276.319**	**20.66**	**0.000**
First-Gen Non-EU Migrant Higher Education	**98.561**	**2.34**	**0.019**
First-Gen EU Migrant No Higher Education	**-105.049**	**-3.17**	**0.002**
First-Gen Non-EU Migrant No Higher Education	**-151.781**	**-5.27**	**0.000**

The regression is a dummy variable interaction. The reference group is native-born population without higher education from the United Kingdom, which at the time of the survey was still in the EU. The regression shows that respondents who are first generation migrants with a higher education degree from other EU nations earn the highest per capita income out of the groups included in this regression. Native-born population with a higher education earn the second highest income out of the groups studied. Higher educated non-EU migrants tends to earn

higher per capita income than native-born population without higher educaiton, but less than that of the native-born population with higher education. The two groups that earns the lowest per capita income are the non higher educated native-born population and non higher educated migrants from outside of the EU. Age and age squared variables are not significant is because the age variable comes from respondent's age, but the *per capita* per month household PPP equivalized income is in terms of number of persons in the household since there is no data on the number of earners in the household.

In the same regression, I included the risk_depression (respondent at risk of depression) and bad_health (respondent are not in good health conditions) dummies, as well as the country filter. The following shows the effects of having bad health, risk of depression, respondent sex, and differences of household income between nations of respondent. The United Kingdom is used as the reference country. All are statistically significant except for Austria, Czech Republic, Sweden, Albania, Serbia, and Turkey.

bad_health	**-69.659**	**-3.55**	**0.000**
risk_depression	**-81.010**	**-6.09**	**0.000**
Respondent Sex	**-68.308**	**-6.25**	**0.000**
Austria	21.170	0.54	0.590
Belgium	**150.970**	**3.85**	**0.000**
Bulgaria	**-418.145**	**-10.43**	**0.000**
Cyprus	**-319.256**	**-8.14**	**0.000**
Czech Republic	-21.928	-0.51	0.608
Germany	**175.862**	**4.88**	**0.000**
Denmark	**131.608**	**3.30**	**0.001**
Estonia	**295.936**	**-7.27**	**0.000**
Greece	**-290.288**	**-7.45**	**0.000**
Spain	**-274.252**	**-6.29**	**0.000**
Finland	**103.078**	**2.58**	**0.010**
France	**96.571**	**2.50**	**0.012**
Croatia	**-230.829**	**-5.69**	**0.000**
Hungary	**-203.422**	**-4.90**	**0.000**
Ireland	**-123.724**	**-3.07**	**0.002**
Italy	**-117.067**	**-3.35**	**0.001**
Lithuania	**-361.007**	**-9.10**	**0.000**
Luxembourg	**340.661**	**7.95**	**0.000**
Latvia	**-429.041**	**-10.63**	**0.000**
Malta	**-205.113**	**-5.06**	**0.000**
Netherlands	**109.789**	**2.71**	**0.007**
Poland	**-282.907**	**-6.73**	**0.000**
Portugal	**-230.284**	**-5.50**	**0.000**
Romania	**-396.497**	**-9.72**	**0.000**
Sweden	64.765	1.66	0.098
Slovenia	**-401.690**	**-9.71**	**0.000**
Slovakia	**-254.590**	**-6.13**	**0.000**
Albania	-594.528	-1.22	0.223
FYR Macedonia	**-381.333**	**-2.18**	**0.029**
Montenegro	**-268.320**	**-2.12**	**0.034**
Serbia	-193.748	-1.81	0.071
Turkey	-203.338	-0.76	0.449
Constant	**690.624**	**12.52**	**0.000**

Three countries are automatically omitted from the regression for having no response in at least one of the independent variables (Norway, Iceland, and Kosovo). Norway and Iceland's data, for example, does not have responses regarding a person's immigration status. This is likely due to laws protecting the privacy of the respondent's immigration status.

EU Higher Education Attainment Average	**40%**	
EU born Higher Education	7,972	**27.7%**
EU Born No Higher Education	20,846	72.3%
Non-EU Born Higher Education	536	31.3%
Non-EU Born No Higher Education	1,177	68.7%

Something to note is the percentage of EU born respondents with higher education is *lower* than the actual average higher education attainment average of the EU: 27.7% vs 40% (European Commission, 2017).

The dummies risk_depression (respondent at risk of depression) and bad_health (respondent are not in good health conditions) are likely correlated, but in some cases, one does not mean the other, thus both are included in the regression, and they both tell the same story: if a person is at risk of depression or has bad health, their earnings power is likely lower.

	Not At Risk of Depression	**At Risk of Depression**
No Bad Health	22,156 80.37%	5,411 19.6%
Bad Health	992 34.4%	1,891 65.6%
% with Bad health at risk of Depression	65.6%	
% with Bad health not at risk of depression	34.4%	
% at Risk of depression with Bad health	25.9%	
%at Risk of Depression without Bad health	74.1%	

Number of Obs.	**24,651**		**α = 0.05**
R-Squared	**0.0989**		
Adj R-Squared	**0.0973**		
	Coef.	t	p>|t|
percapinc			
=			
Age	3.319	1.82	0.069
Age^2	0.024	1.41	0.158
First-Gen EU migrant Higher Education	**366.606**	**8.69**	**0.000**
Second-Gen Migrant Higher Education	**325.225**	**8.81**	**0.000**
Native-Born Higher Education	**272.186**	**19.47**	**0.000**
First-Gen Non-EU Migrant Higher Education	**104.494**	**2.51**	**0.012**
Second-Gen Migrant No Higher Education	28.375	1.07	0.284
First-Gen EU Migrant No Higher Education	**-102.273**	**-3.11**	**0.002**
First-Gen Non-EU Migrant No Higher Education	**-146.700**	**-5.15**	**0.000**

By including second-gen migrants, the regression shows that the earning power of second-gen migrants with higher education (orange row) is second only to the intra-EU migrants with higher education when compared to the reference group (UK native-born without higher education).

Intra-EU migrants and the Schengen Area

The results show that those holding an EU passport with a higher education degree residing another EU nation generally earn the highest income out of the groups studied. This may be attributable to the freedom of movement granted by the Schengen agreement. An Austrian may be working in Germany or a Finn maybe working in Sweden. The four freedoms granted by

the Schengen agreement have generally to be found to benefit the participating states in various studies (European Parliament, 2016). Although intra-EU immigration may seem promising, under that situation, it must be remembered that a member state's gain in taxation revenue due to an intra-EU migrant residing in the country is at the expense of that person's home country. The EU is a rapidly aging area altogether and must seek action in solving the issue of aging societies as one.

Refugee immigration

Hypothesis #2 is not rejected by the regression. The higher-educated migrants from non-EU countries see higher earnings than non-higher educated migrants from within the EU. But the earnings of these higher-educated, non-EU migrants generally do not match their native-born higher-educated counterparts. Out of the groups studied, the lowest earners are the non-EU migrants without a higher education; this is the category most recent migrants from the Middle East fall into, but their incomes do not fall too far behind the non-higher-educated native-born population. One factor contributing to the lower earnings found in non-EU migrants without higher education *and* non-EU migrants *with* higher education is language barriers. It takes much time and energy to learn a language. For many refugees, they face uncertainty in their chances of receiving a residence permit, and in countries such as Sweden, there is no law requiring a time limit on asylum decisions (Akari, 2019). Even if granted access to the labor market, many refugees still do not have access to skilled jobs. This is due to the socioeconomic nature of many refugees from the recent influx into the EU: many are not highly educated, and those with education may not have their education validated by their host nation. This disincentivizes many employers from hiring refugees, even if they may be fluent in host country language (Akari,

2019). There are, however, nations that are currently taking steps in improving third-country education recognition and have programs in which migrants could demonstrate their skills.

Hopes are on higher educated second-generation migrants?

My research has shown that higher-educated second-generation migrants have the second highest earning power out of the groups studied. This is likely due to second-generation migrants' better integration than first-generation migrants. They may be closer culturally to the host nation or exhibit biculturality (Portes & Rumbaut, 2001; Portes & Zhou, 1993). Second generation migrants also do not face many problems that plagued their parents, such as language and cultural understanding. This result, while seemingly promising, does not do much to help the nations that are aging rapidly. Finland, for example, is expected to lose population by 2031 (Statistics Finland, 2019), thus they do not have much time to wait for the contribution of second-generation migrants.

Discussion

Welcoming Refugees to Increase Working Population in the EU

Although higher educated first-generation migrants from non-EU nations may earn higher income than the average, the recent European migrant crisis saw a large influx of working age population aged 18-34, many of whom have not undergone higher education. Among recent Syrian refugees in Norway, 67 percent lack "upper secondary education" (Statistics Norway, 2018, p.5). While refugees bring in the much-needed working age population some aging European nations need, their earnings power does not match that of the native-born populations, even after residing in host nations for a decade (Sarvimaki, 2017). Employment rate data from Finland, which typically sees an employment rate of around 70% (Statistics Finland, 2020), shows that the refugee employment rate after 10 years of arrival is about 25% (Brell, Dustmann,

and Preston, 2020). Similar trends, though not as extreme as found in Finland, are seen in Norway, Denmark, and Germany (Brell, Dustmann, and Preston, 2020). The general trend is that although employment rates for refugees could start low, in European countries they eventually see a rise after a decade, even if they do not match that of the average employment rates of the country, but there are great variabilities across different countries. Sarvimäki's research (2017) from time series data in Finland have shown that earnings of refugees from various nations and the former USSR does not match that of the native-born population even after years of stay in Finland.

Beyond the lower earnings power and lower employment rates from the first-generation migrants, it is well known that refugees are very likely to depend on social welfare and are more likely to be unemployed than other types of migrants, at least at the beginning of their stay in the host country. In 2016 Swiss social welfare statistics, as many as 85% of refugees in Switzerland received welfare benefits (BFS, 2017). Based on my research and historical and time series data research done by others into refugee earnings, and employment rates, allowing refugee immigration is not a promising solution, if at all, to the problems an aging society faces. The story could shift when looking at second generation immigrant data, as preliminary data shows that second generation migrants with higher education degree not only matches but exceeds the earnings power of native-born population with higher education. This finding is very promising for countries where aging does not pose an immediate threat (ex: US, Canada, Norway), but less so for the countries that are (ex: Finland, Spain, Italy, Greece, Poland) (OECD, 2019)

Integration and Its Costs

For many refugees, two situations may occur: 1. The refugee is certain that they will be granted residence status, or 2. The refugee is uncertain whether they will be granted any status at

all. Under scenario one, it is more likely that the refugee will try to integrate into the society by acquiring language and even continuing with their education. Scenario two is when the refugee is uncertain whether they will devote energy into acquiring host country language because of the uncertainty of their future in host country (Akari, 2019). In addition, to help asylees integrate better in the job markets, countries have improved their integration programs to include skills validation. Sweden, for example, has a digital platform called JOBSKILLS.se that allows migrants to validate and document their skills more easily (Akari, 2019). Another challenge facing these nations is confirming the identities of the asylum seekers. European nations have "observed an increase in the number of international protection applicants unable to provide a valid proof of identity." (European Commission, 2017, p.4).

For countries that were most affected by the influx of migrants in 2015 and 2016, such as Germany and Sweden, the monetary cost of receiving and integrating refugees were high. In 2015, Germany spent about 0.5% of GDP and Sweden spent about 1.35% of GDP (OECD, 2017). In many nations, local governments bear some of the costs of immigrant integration, but they may not be the ones to see the benefits: many are required to remain in the municipalities to which they were assigned to, only allowing freedom of movement if they find employment elsewhere (OECD, 2017).

Policy Implications

My finding concludes, as expected, that: refugee immigration may induce a drag on the economy for countries already burdened with an aging society. Refugee immigration from the European Migrant crisis not only may not replace the earnings power of the shrinking native-born workforce, and the direct financial costs related to integrating immigrations are also heavy for certain countries (Sweden). In addition, my research also shows that the benefits of Schengen

area freedom of movement to the European Union are outlined in the regression: Migrants from within the EU earns the highest incomes out of all the groups studied. Since European nations tax individuals based on country of residence, it provides a tax revenue benefit to the country where such migrant resides, of course at the expense of the migrant's home nation.

As aging societies face a shrinking workforce to support an enlarging dependent population, their national resources must be utilized wisely. One of the recommended solutions by French President Macron and the European Commission was to form a unified European response and prevent the migrants from reaching European soil. This could prevent irregular migration from putting nation's migrant integration and social welfare programs under unnecessary pressure.

Limitations

This study is not only limited by the available responses in the 2016 European Quality of Life Survey, but also lack the migrant's length of time stayed in host nation, which contribute to rising earning of migrants after long periods of stay in host nation. In addition, countries such as Norway lack data on the migrant status of survey respondents, and countries that did have migrant status responses may have lower number of observations than other countries, such as Germany or France. The survey itself was not conducted with respect to proportional population size: highest respondent count is Italy (1,997), and lowest respondent count being Latvia (994). Furthermore, the data I used does not break down the migrants by country of birth. Migrants of Non-EU nations could come from more developed countries like US, Canada, or China, which are more likely to be skilled migrants and much less likely to be asylees or refugees. But migrants from Afghanistan, Syria, and Somalia are much more likely to be refugees and asylees than other types of migrants. There is expected to be significant disparity between these

nationalities and their ability to integrate into the workforce and society. The dataset also does not contain data on the number of earners in a household. This is important because the dependent variable (percapinc) was per capita based on the number of persons in a household, instead of number of *earners* in a household. This affected the age and age squared variables because the age variable is based solely on the primary respondent.

Conclusion

Many public responses and protests by native-born civilian population in Europe was based on the notion that migrants – especially refugees, does not integrate to European societies well, including labor market integration. This has resulted in a revival of nationalist and right-wing movements across many European nations. The findings of this paper are largely in line with the view that first generation migrants from outside the EU that do not have a higher education degree (refugees from recent migrant crisis fall largely under this category) do not earn as much income as other types of migrants and native-born population. It must be noted, however, that higher educated second generation do see earning power that is that exceeds that of the higher educated native-born population. (adding more)

Works Cited

- Akari Hala, (2019). Asylum Seekers in The EU Labour Market: The Example of Swden. *European Council on Refugees and Exiles.* https://www.ecre.org/wp-content/uploads/2019/05/Working-Paper-02.pdf
- Borjas, G. 1990. Friends or Strangers: The Impact of Immigration on the US Economy. *New York: Basic Books.*
- Borjas, G. 1994. "The Economics of Immigration." *Journal of Economic Literature* 32(4):1667–1717.
- Brell, C., Dustmann, C., & Preston, I. (2020). The Labor Market Integration of Refugee Migrants in High-Income Countries. *The Journal of Economic Perspectives, 34*(1), 94-121. Retrieved April 19, 2021, from https://www.jstor.org/stable/26873531 https://www.jstor.org/stable/pdf/26873531.pdf
- Bundesamt für Statistik, (2017). Sozialhilfebeziehende in der Schweiz 2016. *Swiss Federal Office for Statistics.* https://www.bfs.admin.ch/bfs/de/home/aktuell/neue-veroeffentlichungen.assetdetail.4142188.html
- Chiswick, B. 1978. "The Effect of Americanization on the Earnings of Foreign Born Men." *Journal of Political Economy* 86(5):897–921. http://dx.doi.org/10.1086/260717.
- Chiswick, B. 1979. "The Economic Progress of Migrants: Some Apparently Universal Patterns." Pp. 357–399 in Contemporary Economic Problems, edited by W. Fellner. Washington, DC: *American Enterprise Institute for Public Policy Research.*
- Clayton, Jonathan., Holland, Hereward. (2015). Over One Million Sea Arrivals Reach Europe in 2015. *UNHCR Refugee Agency* https://www.unhcr.org/5683d0b56.html Refugee Agency 2015
- Contucci, Pierluigi., Rickard Sandell. (2015). How integrated are migrants? *Demographic Research*. Volume 33, Article 46. https://www.demographic-research.org/volumes/vol33/46/33-46.pdf.
- Djuve, A. B. and Hagen, K. (1995), Skaff meg en jobb! Levekår blant flyktningeri Oslo, *Fafo-report no. 234 Oslo: Fafo*.

- Eurostat (2016), Second Generation Immigrants in the EU generally well integrated into the labour market. *Eurostat Press Office*. 6e144b14-d5e1-499e-a271-2d70a10ed6fe (europa.eu)
- European Commission. (2017). European Semester Thematic Factsheet: Tertiary Education Attainment. *European Commission*. https://ec.europa.eu/info/sites/default/files/file_import/european-semester_thematic-factsheet_tertiary-education-attainment_en.pdf
- European Foundation for the Improvement of Living and Working Conditions. (2018). European Quality of Life Survey Integrated Data File, 2003-2016. [data collection]. 3rd Edition. UK Data Service. SN: 7348, http://doi.org/10.5255/UKDA-SN-7348-3
- European Migration Network, (2017). Challenges and Practices for Establishing the identity of third country nationals in migration procedures. *European Commission*. 00_eu_synthesis_report_identity_study_final_en_v2.pdf (europa.eu)
- Hagelund, A. (2020). After the refugee crisis: public discourse and policy change in Denmark, Norway and Sweden. CMS 8, 13. https://doi.org/10.1186/s40878-019-0169-8
- Kogan, Irena. (2016). Integration Policies and Migrants' Labor Market Outcomes in Europe. *Sociological Science* 3: 335-358.
- Kyriakopoulos, Irene. (2019). Europe's Responses to the Migration Crisis: Implications for European Integration. *National Defense University* https://inss.ndu.edu/Media/News/Article/1824758/europes-responses-to-the-migration-crisis-implications-for-european-integration/
- Nieto, Sandra., Alessia Mantano., Ramos, Raul. (2015). Educational Mismatches in the EU: Migrants vs Natives. *International Journal of Manpower.* Volume 36, Number 4, 2015, pp. 540-561 (22).
- OECD (2017), Who bears the cost of integrating refugees? *OECD Publishing*, Paris. https://www.oecd.org/els/mig/migration-policy-debates-13.pdf
- OECD (2018). International Migration Outlook 2018, *OECD Publishing*, Paris. https://doi.org/10.1787/migr_outlook-2018-en
- OECD (2019). Pensions at a Glance 2019: OECD and G20 Indicators, *OECD*

Publishing, Paris, https://doi.org/10.1787/b6d3dcfc-en.

- Official Statistics of Finland (OSF): Labour force survey [e-publication]. ISSN=1798-7857. September 2020. *Helsinki: Statistics Finland* [referred: 20.4.2021]. Access method: http://www.stat.fi/til/tyti/2020/09/tyti_2020_09_2020-10-20_tie_001_en.html
- Official Statistics of Finland (OSF): Population projection [e-publication]. ISSN=1798-5153. 2019. *Helsinki: Statistics Finland* [referred: 20.4.2021]. Access method: http://www.stat.fi/til/vaenn/2019/vaenn_2019_2019-09-30_tie_001_en.html
- Olsen, B. (2004). 4. Arbeid. In K. R. Tronstad (ed.), *Innvandring og innvandrere.,* 2004 *Statistical Analyses*, Oslo: Statistics Norway
- Portes, A., & Zhou, M. (1993). The new second generation: Segmented assimilation and its variants. *The Annals of the American Academy of Political and Social Science*, 530(1), 74–96.
- Portes, A., & Rumbaut, R. G. (2001). Legacies: The story of the immigrant second generation. *Berkeley: University of California Press.*
- Sarvimäki, Matti, (2017). Labor Market Integration of Refugees in Finland. *VATT Research Reports*. https://www.doria.fi/bitstream/handle/10024/149407/t185.pdf?sequence=1
- Statistics Norway, (2018). Innvandrere og norskfødte med innvandrerforeldre fra Syria. *Rapporter Reports*. https://www.ssb.no/befolkning/artikler-og-publikasjoner/_attachment/355170?_ts=1645efbce30
- The World Bank, World Development Indicators (2019). Population, Male (% of total population) – European Union. *The World Bank*. https://databank.worldbank.org/reports.aspx?source=2&type=metadata&series=SP.POP.TOTL.MA.ZS
- Vilde Hernes, (2018). Cross-national convergence in times of crisis? Integration policies before, during and after the refugee crisis. *West European Politics*, 41:6, 1305-1329, DOI: 10.1080/01402382.2018.1429748