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Integration of refugees in the labour market: Employment and Education in  
Portugal

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To and for you, Pedro.

## **Biographical Note**

Joana Sofia Vilaça Correia da Silva, was born on July 16, 1996, in Vila Nova de Famalicão, where she has lived all her life.

She studied Economics in the University of Minho, where she had the opportunity to be part of the Young Minho Enterprise, a junior enterprise where she contacted for the first time with the labour market and the business world. She was also part of the swimming team and a very active member of the NAECUM, the students of economics association. She graduated in 2017.

Her international experience and passion about different countries and cultures, acquired through travelling and being a part of the International team of the Portuguese scouts association, made her apply to the Master in International Economics and Management in the Faculty of Economics of the University of Porto.

In 2017, Joana had the opportunity to be a volunteer in a refugee camp (Centro Polifunzionale "Teobaldo Fenoglio") in Settimo Torinese, Italy, where she developed the interest in the topic covered by this paper.

## Abstract

The world is witnessing the highest flow of victims of forced displacement ever recorded in human history. In 2019, the United Nations (UN) revealed that 79.5 million were victims of this flow, which represents more than 1% of humanity.. In a world where one person is forced to move every two seconds as a result of conflict or persecution, integrating these individuals is an essential task of the welcoming country, so that they can restore their lives with their families. It is often argued that integration into the labour market is a critical point in integrating into society, and so understanding what factors may influence that same integration can be impactful to policymaking.

The present study aims to correlate the employment and education of refugees and describe their integration in the Portuguese labour market. To this end, it uses data from the Portuguese Labour Force Survey (LFS) (the *Inquério ao Emprego* (IE)) from Statistics Portugal (INE). An econometric model, as a quantitative approach, will be constructed to answer the research questions on the skills and education level of refugees, and whether this allows them to be better integrated into the labour market.

It is expected that there will be a low labour competition between refugees and natives, with a low or non-existence substitution of native labour by refugees. It is also expected that there will be a gap between natives and refugees' level of employment, especially among females (gender gap). The research is limited by the lack comparison with other European countries and by the available data at the moment.

Based on the results of this study, the we outline some policy options to better integrate migrants in general, and refugees in special.

**Keywords:** Refugees; Migrants; Labour Market; Europe; Employment; Integration; Discrimination

**JEL classification:** F15; F22; J15; J16; J24; J61

## Resumo

O mundo está a assistir ao mais alto fluxo de vítimas de deslocação forçada alguma vez registado na história da Humanidade. Em 2019, 79,5 milhões eram vítimas deste fluxo, o que representa que mais de 1% da Humanidade está deslocada, revelou a Organização das Nações Unidas (ONU). Num mundo onde uma pessoa é forçada a deslocar-se a cada 2 segundos como resultado de um conflito ou perseguição, integrar estes indivíduos é uma tarefa indispensável do país acolhedor, de modo a que estes possam restabelecer a sua vida e a dos seus familiares. Sendo muitas vezes defendido que a integração no mercado de trabalho é um ponto fulcral na integração na sociedade, compreender que fatores podem influenciar essa mesma integração pode ser impactante para posteriormente se tomar ação política.

O presente estudo tem, por isso, como objetivo correlacionar o emprego e a educação dos refugiados e descrever sua integração no mercado de trabalho português. Para tanto, utilizará o Inquérito ao Emprego (IE) do INE (INE). Um modelo econométrico, como abordagem quantitativa, será construído para responder às questões de pesquisa sobre as capacidades e o nível de educação dos refugiados e se isso lhes permite uma melhor integração no mercado de trabalho.

Prevê-se que a substituição do trabalho nativo pelos refugiados seja baixa, aumentando a baixa competição trabalhista. Também é esperado que exista uma lacuna entre o emprego de nativos e de refugiados, especialmente entre as mulheres (diferença de gênero). A pesquisa é limitada sem a comparação com os outros países europeus e com os dados disponíveis no momento.

Algumas políticas podem ser apontadas com base nestes resultados para melhor integrar todos os migrantes e, especialmente, os refugiados.

**Palavras-chave:** Refugiados; Migrantes; Mercado de Trabalho; Europa; Emprego; Integração; Discriminação

**Classificação JEL:** F15; F22; J15; J16; J24; J61

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## List of Abbreviations

CPR - Conselho Português para os Refugiados / Portuguese Refugee Council

ESS- European Social Survey

EU - European Union

Eurostat – Statistical Office of the European Union

IE - Inquérito ao Emprego/ Portuguese Labour Force Survey

INE - Instituto Nacional de Estatística/ Statistics Portugal

LFS – Labour Force Survey

LPM – Linear Probability Model

OLS - Ordinary Least Squares

PP - Percentage Points

UNHCR - United Nations Refugee Agency

## Introduction

In 2015, according to the United Nations Refugee Agency (UNHCR), more than one million people crossed the Mediterranean Sea searching to escape the conflicts in their home countries, mainly coming from Syria. In 2017, the global trends paper (UNHCR, 2018) declared that 24.4 million people were refugees seeking to escape persecution, conflict or generalised violence, of which 1,750 applied for asylum in Portugal.

According to the Portuguese Refugee Council (CPR), October 2018 was registered as the monthly peak of people crossing by sea to Europe with more than 220 thousand people making this journey. This migratory flow generated the well-known refugee crisis, the most massive migratory crisis since the second world war. These refugees come mainly from Africa and the Middle East, looking for better working conditions and life stability. Their arrival naturally poses challenges to different societal structures from the education and healthcare systems to the labour market. This research focusses on the latter.

In 1999, at the Tampere European Council, the EU found it vital to assemble a common European asylum system (Lavenex, 2001), with common policies for the labour market integration of refugees. Unfortunately, it was vetoed in the European Council in Nice a few months later, and the discussion postponed until the recent crisis of refugees.

The absence of a common law allows for different immigration policies in each member state, hindering transparency. Furthermore, a common European law could lead to the creation of a common European central authority that could have competence on the matter or at least facilitate cooperation between member states. Within the context of labour market integration, a wide variety of approaches to migration management are being applied. So, there is a need to understand which approach is better to then establish the right policies. One big issue is the recognition for migrants' previous experience and studies. For that, this research focusses on one big question: does a higher level of education increase the probability of employment and consequential integration of the refugee into the labour market?

The importance of providing an economic and social analysis of the refugee crisis is justified by the *momentous* and the urgent need to address it through the improvement of the European asylum and labour market integration policies. In this respect, it is relevant to understand that the entree of refugees presents an increase of labour force supply to the

arrival country; what was described by Barslund, Di Salvo, and Laurentsyeva (2018) as the “Refugee Shock”. It is an increase in quantity and quality, and just the fact that refugees can help alleviate some shortages of specific skills of the labour supply, as opposed to when considered only natives, can cause changes in the labour market equilibrium. The real effect on the labour market will depend mostly on the characteristics of the refugees in comparison to natives, and the refugees’ successful integration into the labour market.

This question is not only economic, but also political. The European Union is based on the idea of cooperation and solidarity, uniting seemingly different countries in a common goal, and many fear that such values are being threatened and can be questioned should the EU fail to solve this crisis. As defended by Angela Merkel<sup>1</sup> – “If Europe fails on the question of refugees, then it won't be the Europe we wished for” – when speaking at the European Council meeting on this subject in 2015. Similarly, Carrera and Gros (2015) pointed out the need for the EU to set policy priorities right concerning this topic, recommending a EU level search and rescue operation in the Mediterranean and an immigration code with flexible channels facilitating the refugees mobility and consequential integration in the European society.

Some researchers have dedicated their time and research to find ways to measure the impact of this refugee crises, especially in areas such as education (Dryden-Peterson, Adelman, Bellino, & Chopra, 2019), health (Pavli & Maltezou, 2017), and social security (Kramer & Didden, 2017). There are also some studies (Cheung & Phillimore, 2014; Joon, Lanninger, & Sundström, 2016) that have evaluated the impact of refugees on a specific country. This study focuses on the Portuguese reality and, as mentioned earlier, not on the impacts of the labour market integration but rather on factors that contribute to such integration, in particular pre-existing skills and level of education.

This work uses data from the Portuguese LFS - *Inquério ao Emprego* (IE) from Statistics Portugal (INE). We use this data to proceed to econometric analysis. Based on the literature, we compute a model to interpret the impact of personal factors in the probability of employment.

This thesis is structured in five main parts: this introduction, a literature review, a methodology, the results and the conclusions. The literature review highlights previous

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<sup>1</sup> Angela Dorothea Merkel is the Chancellor of Germany since 2005.

research and important findings on the topic that help to understand the context around this issue. The methodology exposes a statistical framework available both in Portugal and in Europe, and explains how the information gathered in the literature review contributed to the creation of an econometric model that can interpret the available data from the statistical sources. Chapter four presents each model and meaningful results. The last section puts forward conclusions and recommendations.

## Literature Review

In this chapter, some basic concepts to better understand the theme will be defined and contextualised concerning the issue of migration and integration of refugees. It is important to refer some migration analysis mainly because refugee migration can be considered a particular case of migration, and so it can be analysed and compared as any other migration flow (Gericke, Burmeister, Löwe, Deller, & Pundt, 2018).

It is crucial to consider that being integrated in the labour market is a proxy to being socially integrated (Hammer, 2007), as a fast integration in the labour market allows refugees to feel like a valuable contributor to the society of their host country and not as a burden. Baranik, Hurst, and Eby (2018) conclude that host countries cannot change the refugee negative experience prior to resettling but can help to ease post resettlement stressors.

There is however a difference in presence between refugees and the other migrants or natives in the labour market. Some authors such as Kone, Ruiz, and Vargas-Silva (2019) call it the refugee gap. These authors also concluded that this group of migrants are more likely to be self-employed and that the unemployed refugees rely much on public agencies such as job centres to do their job searches.

Apart from the benefits to the individual, the integration of refugees in the labour market is also important because refugees can be a benefit to the economy since they contribute with a wealth of skills and experience sometimes non-existent in the native population (Morrice, 2007). In fact, many researchers and individuals defend the economic integration of refugees into their host country, as this is beneficial to both parties (Bevelander, 2016; Morrice, 2007).

All these points highlight the necessity to reduce stigmas related to the refugee resettlement and integration (Wehrle, Klehe, Kira, & Zikic, 2018).

### *Migrants versus Refugees*

To correctly study the impact of refugees in the European labour market, one first needs to define the concept of refugee and to highlight the main characteristics that make refugees a particular group within the migrants. Article 1 of the Refugee Convention presents one definition of refugees; refugees are “a third-country national who, owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, political opinion or membership of a particular social group, is outside the country of nationality and is unable

or, owing to such fear, is unwilling to avail himself or herself of the protection of that country, or a stateless person, who, being outside of the country of former habitual residence for the same reasons as mentioned above, is unable or, owing to such fear, unwilling to return to it, [and to whom the exclusion clauses do not apply] (Article 2(d)”, as cited by Janik (2017) and Lambert (2017)).

Nevertheless, the most consensual and easily interpreted is the definition used by the UNHCR, defined in 1951 on the Refugee Convention, stating that “Refugees are people who have fled war, violence, conflict or persecution and have crossed an international border to find safety in another country”. In this study, we use the definition from the Refugee Convention.

The European Union reports as an immigrant someone who is choosing to establish his/her usual residence in the territory of a Member State for at least 12 months, having previously been usually resident in another Member State or a third country (Regulation (EC) N° 862/2007 on migration and international protection). This is the definition that we will use to facilitate the differentiation between refugees and other migrants.

Considering these two definitions, we assume that the main characteristics that distinguish refugees from migrants are the status of their country of origin and their will to migrate. If their country of origin is at war, violence or conflict, and if the migrant did not liberally choose to flee, then we would be in the presence of a refugee, who usually is also unwilling or unable to return home (Cortes, 2004; OECD, 2015b).

There are not many studies focusing exclusively on refugees. Most existing studies are recent and focus of the EU welcoming the larger numbers of refugees since 2015.

## **1. Integration and labour market**

Another critical definition to keep in mind is employment. “The concept of employment involves an economic, a sociological, and a psychological meaning” (Lauterbach, 1977, p. 283), highlighting that employment is when someone receives an income derived from their work; secondly that being employed gives the person a certain role in society, since when they are unemployed it can make them feel like a “social outcast”. Psychologically, for many, being employed gives meaning to life and purpose to the person, just like the lack of occupation usually leads the person to a sense of frustration and

estrangement from society. Of course, part of this meaning is economic and for that people depend on their wages.

Nevertheless, two of the main definitions and keywords of this work are integration and discrimination. Park and Burgess (1924, p. 735) contributed to the literature with one of the earliest and most notorious definitions of integration, “a process of interpenetration and fusion in which persons and groups acquire the memories, sentiments, and attitude of other persons and groups and, by sharing their experience and history, are incorporated with them in a common cultural life”. On the other hand, discrimination, as stated by Velasquez and Velazquez (2002), is the act of willingly judging people based on prejudice and other ethically reprehensible behaviour instead of based on their merit.

Bauer, Braun, and Kvasnicka (2013) offered the literature a comprehensive empirical analysis about the economic integration of forced migrants in the medium and long-run and concluded that displaced people are, on average, still economically disadvantaged relative to their native peers. Ruiz and Vargas-Silva (2013) and Becker and Ferrara (2019) defended that the impact of forced migration can be either positive or negative depending on specific attributes of the migrants, the nature and proportion of the conflict and the involvement from the international community.

The necessity of each country to control the impact of the refugee crisis in its economy led to the creation of country-specific programs. Some studies have analysed these programs that target exactly this economic disadvantage between peers to reduce discrimination and improve the integration of refugees. One of these cases is the Swedish study exploring the impact of the Swedish Government Reform on the likelihood of employability of refugees in Sweden, comparing the period before and after the reform on the refugee integration program (Joonas et al., 2016). The designation of "refugee" meant only those who sought asylum from Sweden and those who had the purpose of reuniting with the family. In general, the new refugee integration program had given refugees an opportunity to see how they can validate their education and work experience before they emigrated. The program has also been useful in understanding the needs and the training needed according to refugees' qualifications. In this case, 42% of the considered individuals had primary education (9 years or less of formal education), and almost 29% had upper education when they arrived in Sweden. The program included language education, Sweden costumes and basic training to allow the refugees to improve their qualifications and integrate the labour market.



Bevelander and Pendakur (2014) compared Sweden results to Canada. They concluded that the employment differentials are smaller in Sweden, which was explained by the researchers as the success of Sweden's 18 months settlement training offered to refugees.

Chadderton and Edmonds (2015) stated that countries with specific resettlement and integration programs for refugees ease their economic integration. However, when the country does not have a program like Sweden, these qualifications and skills acquired by the refugees are a result of investing more in country-specific human capital (Cortes, 2004).

According to the OECD (2015a), the refugee crisis inevitably resulted in an increase of public spending to subsidise processes of asylum and programs of integration. These programs differ depending on the country, and so does the waiting time to acquire citizenship. Citizenship influences the integration of refugees in society; lower waiting time means better integration and opportunities. Relating to the labour market access, it also depends on the country policies and legal regimes (Brell, Dustmann, & Preston, 2020). Some allow the refugees to access the labour market while they are waiting to be granted the asylum visa, while in other countries only after the bureaucracy, are they allowed to have a job opportunity.

Unfortunately, when a country registers a great influx of immigrants, discrimination in relation to them becomes a reality. According to Naumann, Stoetzer, and Pietrantuono (2018) natives prefer highly-skilled migrants over low-skilled regardless of the natives' skill levels, particularly in countries with high exposure to immigration.

Upon the arrival at the destination country, the first goal for immigrants is to obtain legal status to facilitate their life's in their new home. The legal status increases the immigrants wage and rises labour market competition between them and the natives, though natives still have a comparative advantage in communication skills (Steigleder & Sparber, 2017). The lower the integration level, the higher the pressure on public budgets (Barslund, Di Bartolomeo, & Ludolph, 2017).

Laurensyeva and Venturini (2017) and Gathmann and Keller (2017) determined that there is a lag between immigrants and natives in social activities, language and active citizenship and that a faster naturalisation would have a sizeable effect on employment and earnings for women. They also pointed that the immigrant's social and economic integration improves over the years in the host country, typically employment rates for refugees migrants are very low upon arrival and quite quickly increases afterwards (Brell et al., 2020; Sarvimäki,

2017; Zwysen, 2019). The most relevant factor in refugees' adaptation is their demographic characteristics, such as education and gender (Potocky-Tripodi, 2003). The gap between male and female migrants is visible across all regardless of their skill group. As the psychological definition of employment explains, and as integration into the labour market is closely linked to integration in society, low female participation in the labour market can lead to them feeling marginalised in the host country. As confirmed in relation to economic immigrants, also in the case of refugees, the gender gap is heightened in the face of armed conflict and forced migration (Barslund, Di Bartolomeo, et al., 2017; Dahya & Dryden-Peterson, 2017; Rosa, 2019) since women are socially related with household and childcare, and their active participation in society is disregarded. Moreover, recent EU policies have also failed to target gender equality in the labour market (Aybars, Copeland, & Tsarouhas, 2019). The long-term joblessness imposes a cost both for the individuals, in this case women, and also to the society in the future (Bartolini, Gropas, & Triandafyllidou, 2017).

Papadopoulos (2007) points out that the loss of home is a condition that all refugees share upon arrival, and this is a psychological difference between economic immigrants and refugees. To make a better interpretation of the difference between economic immigrants and refugees some researchers came up with the concept of "refugee gap". As explained before, this concept refers to the assumed and measurable disadvantage between these two groups. For example, Connor (2010) estimates the disparity in earnings and occupational attainment.

To reduce the refugee gap, researchers suggest an early integration of refugees in the labour market, enacted by supporting initiatives such as language courses, administrative easing (legal status, asylum process procedures) and housing support. This process should be continuous to enable refugees to apply for a job position compatible and worthy based on their qualifications, and job constraints (Gericke et al., 2018). Hek (2005) and Zwysen (2019) defend that the integration of refugees depends on specific language support, as learning the host country language is a crucial factor to the social relationships that allow refugees to feel integrated. When considering children, it is essential to provide them with primary education in order to minimise gaps of education between them and economic immigrants and natives. These educational support programs, as defended by Franssen, Vargas-Silva, and Siegel (2018), allow refugee children to catch up with those who were not affected by war or persecution.

Results from Barslund, Busse, Lenaerts, Ludolph, and Renman (2016) suggest that the social-economic characteristics of the host country such as employment rate also influence the integration of refugees.

He, Bettez, and Levin (2017) discovered using focus groups that participants of this experience all wanted to be part of a community where they can be active participants. Involving them in society makes them feel part of the community and valued (Morrice, 2007). This discovery may imply that they will do everything that is necessary to integrate in society and therefore, in the labour market that, as said before, is a proxy to the feeling integrated into the community.

Unfortunately, immigrants are often mismatched to jobs, and that generates wage penalties due to difficulties in adapting to their new occupations, and so conclude that their earnings are substantially below natives with similar skills (Dean, 2018). This also led to the issue of labour substitution. Ottaviano and Peri (2012) alleged a small but significant degree of imperfect substitutability between natives and immigrants within education and experience groups and a modest negative long-run effect on the real wages of the least educated natives. Morrice (2007) explained that even with integration programs, the refugees feel a loss of self-esteem related to the loss of social status and professional identity.

Snower (2015) argued that newcomers have valuable skills and can be an incredible contribution to jobs in the fastest growing areas of employment. They also have a positive impact because of the complementary of the jobs, ceasing the fear that immigrants will be natives' substitutes. Ceritoglu, Yunculer, Torun, and Tumen (2017) explained that even when considered possible substitutes, the impact of refugees on the Turkish labour market was limited which suggests that the potential labour effect on Europe also be limited. Knowing that a third of all arrivals in the EU over the period 2014-17 were young low-skilled men, if we assume that refugees compete with other migrants and natives from the same sex and age groups, with similar levels of education, we can presume that the most affected group of natives is men with low level of education, who usually do more labour intensive jobs. According to these authors Barslund et al. (2018), this generates an increase in the supply curve which, in the long run, will result in a decrease of wage rated to low-skill work. The proposal to resolve this problem in this paper is further education and vocational training. Arroyo (2017) defended that trade preferences policies can also be a solution to support the refugees' integration in the asylum countries, especially in labour-intensive sectors.

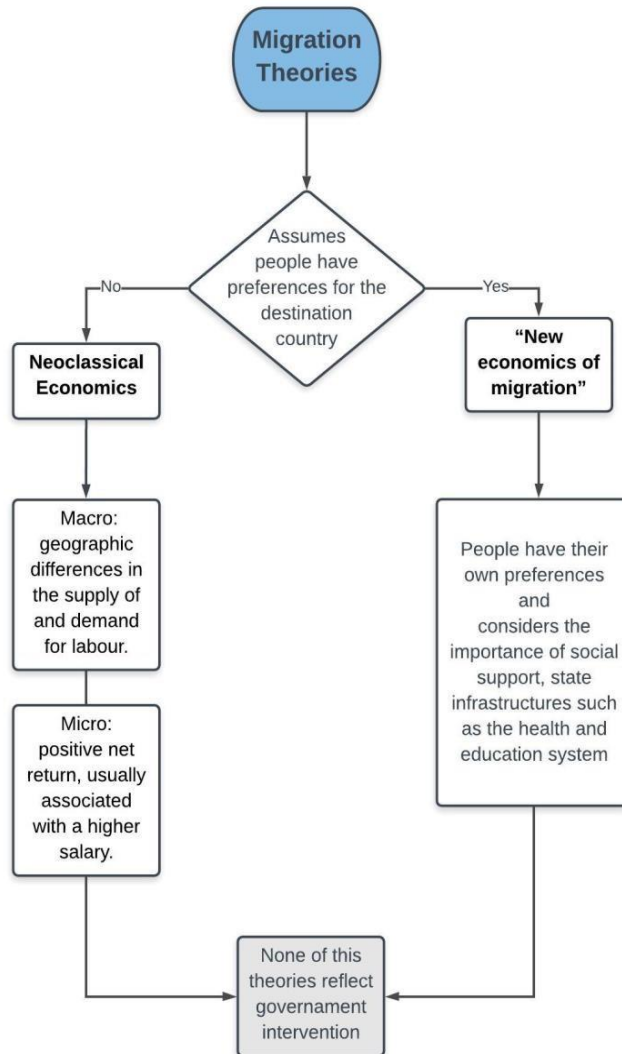
Matos (2012) considered that the expectation of the productivity of immigrants by employers is lower compared to native workers caused by the uncertainty about their past and studies, which can be applied in the refugee case as well. Matos (2012) also concluded that in the first years of residence in Portugal, the majority of immigrants work in companies with low productivity and with a high proportion of immigrant workers (from the same country). At the same time, immigrants often change their place of residence and place of business, seeking better living and working conditions. Due to the decrease of uncertainty related to the immigrant's productivity, part of the wage gap between foreigners and natives is reduced over the years. The drastic change in the profession and the knowledge of the language of the host country were not considered statistically significant for the process of integration in the labour market and for the reduction of the salary difference between foreigners and natives, contrary to what was expected. Using the same sample as in her previous work, Matos (2016) focused on studying the returns of Portuguese speakers immigrants, comparing the two largest groups: Brazilians and Western Europeans. It is considered that having fluency in the language of the host country is an enabler of the integration of immigrants in the labour market. However, this is only true for jobs that require high academic qualifications. As according to Peri and Sparber (2009), natives usually perform activities demanding communication skills. In contrast, immigrants do labour-intensive jobs and, therefore, the knowledge of the language may not be an advantage. This paper (Peri & Sparber, 2009) concludes that regardless of the difference in language knowledge, the results show that the mean salary and their growth rate are the same for the two groups of immigrants.

## **2. Theories of migration**

Although refugees and migrants are not synonymous, they are close situations since we can consider refugees as a particular case of migration (Gericke et al., 2018). Thus, given the lack of studies on the insertion of refugees in the labour market, it is important to understand international migration, and so to know the theories associated with this phenomenon. When a person decides to migrate, this decision is based on many factors such as economic (life conditions, wage,...), political, social or cultural arguments, but can also differ from a regular or irregular migration based on the wealth of the person in question, opportunities they have or structural aspects such as legislation (Van Hear, 2010).

There are two main approaches in this area (see Figure 1): neoclassical economics and the new economics of migration (Massey et al., 1993).

Figure 1 Flowchart of Migration Theories



Source: Author's own computation

We cannot consider that refugees move according to their skills; they move to be safe and have a new chance in life. Therefore, the neoclassical economics theory does not apply in the case of refugees. The "new economics of migration" applies insofar as they are choosing the country where they want to apply for residence permit. According to the directive 2011/95/EU of the European Parliament and of the Council a "residence permit means any permit or authorisation issued by the authorities of a Member State, in the form provided for under that State's law, allowing a third-country national or stateless person to

reside on its territory”. A residence permit allows the individual to legally establish his/her life in that country, setting the path for an integration in society as well as in the labour market.

None of these theories reflects the importance of regularisation on the decision of the migration but, as is well known, the legislation can influence the migrant’s decision, especially when choosing the country where they want to go. For example, in 2001, the Portuguese legislation on the legalisation of immigrants was simplified. Consequently, in that year, the foreign population increased by about 69% and, in 2002, 4.0% of the total population in Portugal were immigrants (Statistics Portugal (INE)). This was one of the reasons that attracted foreigners to Portugal as well as the economic growth and developed infrastructures.

Oliveira, Peixoto, and Góis (2017) note that not all asylum requests are granted, and therefore not all migrants that seek it are given a refugee status. As pointed in the ACM (2017) there are some countries with a higher percentage of success in this process such as Germany, Austria, France, Sweden, and Greece, giving refugees better chances of integration through granting refugee status.

Of course, a large flux of migrants such as the refugee crisis registered in Europe since 2015, is not reflecting policy changes about migration, but the refugees fear of violence and persecution in their home countries. This kind of flux carries very high costs and demands a united response from all states of the European Union.

Policymakers from rich countries prefer to use foreign aid than to provide these programs to refugees since it is proved that foreign aid can be used to curb the flow of migrant, due to the negative relationship between it and migration (Lanati & Thiele, 2018). Ruhs (2019) defends that rich countries are reluctant to offer resettlement to many refugees.

When refugee protection and asylum are considered as a global public good as Barslund, Di Bartolomeo, et al. (2017) state in the MEDAM assessment report, there are two main characteristics to analyse as in any other good: rivalry and excludability. Rivalry means that the consumption by one party reduces the utility or ability of another using the good, while excludability of a good if it is possible to avoid consumers who have not paid for it from having access to it. Barslund, Akgüç, Laurentsyeva, and Ludolph (2017) concluded that refugee protection is a non-rivalry and a non-excludability good. This kind of good, both non-rivalry and non-excludability, can generate temptations to free ride. In other words and applying to this case, as long as refugees remain in the first safe country where they have

arrived, other countries may avoid providing financial support or shelter in their countries. This is still happening, posing a challenge for frontline countries such as Italy and Greece (Fóti & Fromm, 2016). Being considered as a global good rises the problem of the nonexistence of global authority to ensure quality standards to the refugee protection.

Current flows thus respond to a complex combination of pull factors and repulsion, challenging concepts, theories, statistics and means of regulation. The map of recent movements to Europe mix flows that should be theoretically distinct, but in reality, they get confused. Like it often happens, when a theory is no longer able to describe reality, it means time has come for a new theory to emerge (Oliveira et al., 2017).

### **3. Study hypothesis**

Dustmann, Fabbri, and Preston (2005) study revealed that immigration had no strong overall effects on aggregated employment, participation, unemployment and wages. Still, some differences were depending on the education background of the migrants in the British labour market. Based on this result, one can assume that this may also happen for the Portuguese case, and so studies must focus on differences according to the level of education.

Another expected result is a better performance from “economic migrants” when compared to refugees as in the United Kingdom labour market (Ruiz & Vargas-Silva, 2018) or in the Austrian labour market (Eggenhofer-Rehart et al., 2018). Given that, refugees are less likely to be employed and earn less than natives and other migrants. It is important to remember that refugee-workers will be competing with other migrant workers (Ruhs, 2019). Battisti, Giesing, and Laurensyeva (2019) conclude that similar frictions between natives and refugees are likely to weaken refugees’ position to enter the labour market.

Bakker, Dagevos, and Engbersen (2017) and Jestl, Landesmann, Leitner, and Wanek-Zajic (2019) conclude that there are employment gaps across population groups and subgroups of migrants by gender, age and educational level. This will also reflect in a wage gap between groups according to the different specification of work as labour intensive, technical skilled, routine and non-routine tasks (Baum, Lööf, Stephan, & Zimmermann, 2020).

According to most articles referred in this work, we can assume that education does influence the employment of refugees and as analysed by Chadderton and Edmonds (2015), countries with specific resettlement and integration programs for refugees ease their

economic integration. These programs consist in language provision and accreditation of prior and experiential learning for the refugees with their educational biography, certificates, diplomas, records of professional experience and formal and informal skills, in other words, in providing future employers evidence of experience and level of education of the refugees. Dumont, Liebig, Peschner, Tanay, and Xenogiani (2016) reinforced the idea that the knowledge of the language has a significant impact in employment outcomes and introduced to a critical awareness that it is more likely for a refugee to be overqualified than an economic migrant and the special challenge that is bringing refugee women into employment.

H1.0: Formal Education influences the employment of refugees.

H1.1: Formal Education does not influence the employment of refugees.

Emmenegger and Stigwall (2019) refer the insufficient attention to special needs from women, particularly to refugee women, from asylum policies may interfere with their willingness to engage in the labour market. These cultural reasons result in the less successful integration of women refugees and consequentially a gender gap (Konle-Seidl & Bolits, 2016).

H2.0: Women have worse employment rates than men.

H2.1: Women do not have worse employment rates than men.



## Methodology

The main objective of this study is to identify the main skills of the refugees that entered Europe since 2011 and if a higher level of education allows them better integration in the labour market, that is, to correlate employment with formal education and the sense of belonging. As defended by Codell, Hill, Woltz, and Gore (2011) a meaningful job with adequate earning promotes dignity and economic stability for all migrants.

Given that the research question is to understand the impact of education on the integration of the refugee into the European labour market in the specific case of the Portuguese labour market, we will use a quantitative approach.

Quantitative methods emphasise objective measurements and the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and surveys, or by manipulating pre-existing statistical data using computational techniques. Quantitative analysis is a technique that uses mathematical and statistical modelling, measurement, and research to understand and explain a particular phenomenon. Correlational analysis is a statistical procedure to determine the direction of a relationship (positive or negative correlation) between two variables and the strength of the relationship. Quantitative research focuses on gathering numerical data and generalising it across groups of people or explaining a particular phenomenon (Babbie, 2010; Muijs, 2010). This work will use the *Inquérito ao Emprego* (IE) carried on by the INE for the period between 2011 and 2019.

IE aims to characterise the labour market situation of the population. It is the Portuguese version of a quarterly survey, conducted by the national statistical institutes across Europe and that are centrally processed by Eurostat, for residents of family households in the national area with quarterly and annual results publications. Information is obtained by direct collection through computer-assisted interviewing in a mixed way: first, the housing interview is conducted in person, and the following five inquiries are made by phone. The information collected allows for a detailed characterisation of the individuals in respect to several topics, namely economic and sociodemographic variables such as age, gender, education/training, geographic area of residence and work, and income; employment status (employed, unemployed or inactive) and job attributes (full or part-time and type of contract).

Using STATA, a software for statistics and data science and correlational research, we analyse the correlation between variables. A correlation exists when the dependable variable increases or decreases correspondingly with the explanatory variables.

Understanding international relation and phenomenon like this refugee crises became increasingly essential since it can explain cross-cultural behaviour (Schweitzer & Steel, 2008).

Research on refugees labour market integration faces multiple problems related to data analysis. Brell et al. (2020) noted some issues such as “small data” and the difficulty in distinguishing between migrants and refugees. Differentiating refugees from the economic immigrants will be the first challenge of this dissertation, especially in what concerns the econometric analysis due to the difficulty in distinguishing in the database refugees from immigrants based on the variables available. Some papers estimate the period of relocation and country of origin. According to UNHCR (2019) Global Appeal Report, most of the asylum applicants are from Syria, Afghanistan, Nigeria and Iraq and according to Serviço de Estrangeiros e Fronteiras (SEF) also from South Sudan, Burundi, Eritrea, Somalia, Sudan, the Democratic Republic Of The Congo, Republic Of Central Africa, Venezuela and Yemen. In the study we have considered these countries as country of origins of refugees (and not of other migrants).

Based on survey data, findings of research on refugees reflect large gaps in employment, income, and job quality in relation to other migrants which fade over time (Dumont et al., 2016; Fasani, Frattini, & Minale, 2018; Zwysen, 2019). However, another identified problem with this type of data is uncertainty related to the translation of questionnaires and migrants’ answers (Pernice, 1994). This occurs because there is a lack of official translators in the data collection exercises targeting refugees. In this study we overcome this difficulty by using official data from the national statistical office, that ensures the language quality of its data. Furthermore, once the data is submitted to the European statistical office- Eurostat- it on its turn ensures the translation into all EU working languages (English, French, and German).

Most of the literature that studies the integration of immigrants in a country's labour market uses econometric models with parameters to characterise the individual to evaluate the performance of the two groups, natives and immigrants.

According to the goal of this work and with the already defined hypothesis, the model to be estimated in the analysis of the probability of an individual being employed ( $y_i$ ) considering their social-economic status assumes the following specification:

$$y_i = \beta_0 + \beta_1 \text{sex}_i + \beta_2 \text{age}_i + \beta_3 \text{age}_i^2 + \beta_4 \text{maritalstatus}_i + \beta_5 \text{immigrant}_i + \beta_6 \text{formaleduc}_i + \varepsilon_i \quad (1)$$

where  $i$  is the individual and  $\varepsilon_i$  represents the disturbance term.

The Linear Probability model (LPM) is a linear regression model applied to dichotomous dependent variables. Ordinary Least Squares (OLS) is used to estimate the parameters of LPM, which uses a linear function of the independent variables.

This model assumes that the expected value of the error term ( $\varepsilon_i$ ) is zero. There is no correlation between the independent variables and the terms of disturbance; all errors are variable random with constant variance (homoscedasticity) and exclude any form of self-correlation between the different error terms.

When the basic assumptions of the LPM model are valid, among which the four above stated, the Gauss-Markov Theorem indicates that, in the class of linear and centric estimators, LPM is the best estimator in the sense that it has the lowest variance of the estimators.

These assumptions can rise three specific problems: non-normality of the error term, heteroscedastic errors and potentially nonsensical predictions. Although the LPM is easily interpreted, where  $\beta$  is the change in the probability of  $y$  when a parameter changes by one unit (or category), because the dependent variable is being employed or not, the variance of a binary 0/1 dummy depends on the values of  $X$  so there is always heteroskedasticity:

$$\text{var}(y|x) = p(x)[1 - p(x)]$$

and therefore, does not have a normal distribution and neither will the error term ( $\varepsilon_i$ ) and probabilities need to be constrained to be between 0 and 1, which may not happen using LPM. Maddala (1986) defended that disturbances in the LPM are heteroscedastic and therefore OLS is not efficient, the error term is not distributed normally. So, there exist non-linear procedures more efficient than OLS.

To overcome these problems, the Logit model was the chosen solution. Logit model is used to obtain probability in the presence of more than one independent variable when the

dependent variable is binomial (0 or 1). The result is the impact of each variable on the probability of the observed event of interest.

Results in logistic regression, the response variable is dichotomous, assigning a value of 1 to the event of interest (success, for this case being employed) and 0 to the complementary event (failure, in this study being unemployed). In any regression, the key quantity is the average value of the response variable, given the value of the independent variable. This quantity is called the conditional average value and is expressed as  $E [Y / X]$  where Y represents the response variable and X the explanatory variable.  $E [Y / X = x]$  is read as “expected value of Y given X = x”.

Model 1 considers some explicative variables such as age or marital status to characterise the individual better. The probability of being employed can increase with age but the impact of another year as an effect that becomes less and less significant over time and therefore, the introduction of the age quadratic to study that hypothesis. As will be presented in the descriptive analysis, the marital status is considered as single, married, legally divorced or separated, and widowed. As the model is structured to identify the gender gap between individuals, there was the need to insert a gender variable that was called “sex”. The model 1 was the base model for the following models.

So, in order to understand the results from Model 1, presented in Table 4, the margins had to be calculated and then calculate a chi-square test which gives a p-value indicating if the test results are significant or not.

Marginal effects are a useful way to describe the average impact of changes in explanatory variables on the change in the probability of outcomes in logistic regression and other non-linear models. Marginal effects provide a direct and easily interpreted answer to the research question of interest.

## 1. Study context

To better interpret the results of this work it is essential to have a big picture of the social structure present in Europe and especially in Portugal. The refugee crisis has been perceived differently across Europe. It is important to refer that Italy and Greece are considered “doors” of Europe and therefore is valuable to compare their numbers with the most receiving and/or destination countries.

Furthermore, the refugee group has specificities that this framework will try to enhance, such as being the majority of male individuals, not as the native population where usually more than 50% is female.

### a. Europe

According to the Eurostat article published on 20th of June of 2019, the day celebrated as World Refugee Day, in 2018, more than 585 thousand people asked their first asylum request in Europe. Most of these applicants were from Syria (14%), Afghanistan (7%) and Iraq (7%). Although they applied mostly to Germany or France, the three main countries receiving these migrants were Cyprus, Greece and Malta. The article also referred that 78% of the asylum seekers were under 34 years old, highlighting that 47% were between 18 and 34 years old. Based on data published by The World Bank, in 2018, more than 2,5 million people were refugees living in the EU member states.

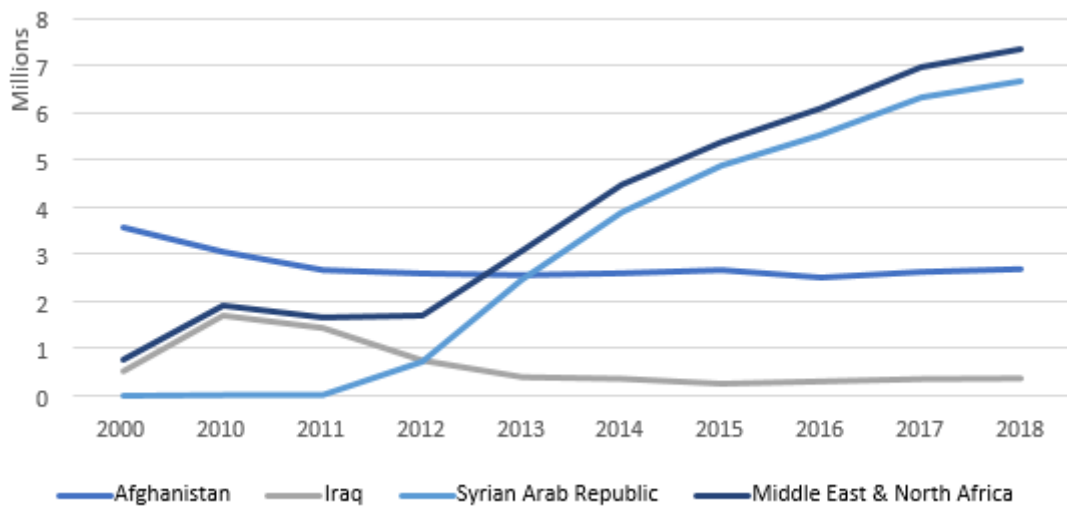
**Table 1 Refugee population by country or territory of asylum, 2000-2018**

	2000	2010	2014	2015	2016	2017	2018
<i>EU</i>	1521238	1156240	980180	1211010	1769829	2166038	2363112
<i>France</i>	132508	200687	252264	273126	304546	337143	368352
<i>Germany</i>	906000	594269	216973	316115	669482	970302	1063837
<i>Italy</i>	6849	56397	93715	118047	147370	167260	189243
<i>Greece</i>	6653	1444	10304	24838	46427	38948	61460
<i>Cyprus</i>	76	3394	5126	7067	8484	9745	11014
<i>Malta</i>	190	6136	6095	7075	7948	7949	8579

Source: Author's own computation based on Eurostat data.

Syria was the main country of citizenship of asylum seekers in the EU Member States in 2018, a position it has held each year since 2013, followed by Afghans and Iranians, respectively. Since the start of the Syrian civil war in 2011, more than 11 million Syrians refugees fled their homes in search of asylum worldwide. There is a very substantial prejudice against Syrian refugees and others and their religion (Carlson et al., 2019).

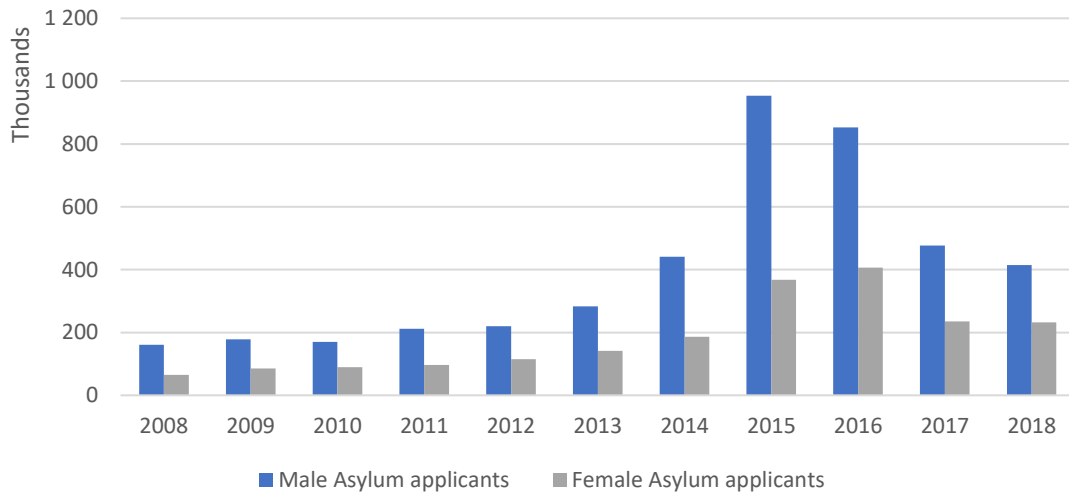
**Figure 2 Refugee population by country or territory of origin, 2000-2018**



**Source: Author's own computation based on Eurostat data.**

The distribution of asylum applicants by sex shows that more men than women were seeking asylum in the last decade.

**Figure 3 Distribution by gender of (non-EU) asylum applicants in the EU, 2008-2018**



**Source: Author's own computation based on Eurostat data.**

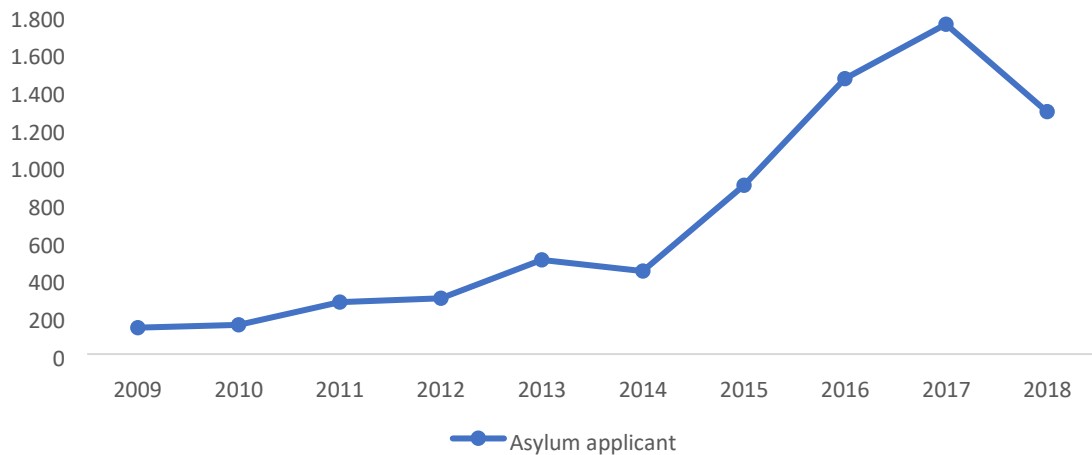
This can be explained by cultural or fear associated reasons. Women in many countries, still nowadays, lack of economic resources or freedom to travel alone both within their own country and outside it as well as they have the responsibility for children and children’s welfare. And when they are able to escape the violence within their home country, they expose themselves to violence during their journey and/or on arrival in a destination country (Freedman, 2016).

**b. Portugal**

According to the European Social Survey (ESS) and the ACM (2018), Portugal is a country where the population shows openness to receiving refugees expressing a favourable opinion to host refugees, namely when they think the national government should expedite the evaluation of asylum applications. Disagreeing with this opinion are countries such as the Czech Republic, Hungary and Estonia.

In 2018, the first asylum applicants in Portugal reached the 1200. According to INE, the majority of applicants came from Angola, Ukraine and the Democratic Republic of the Congo.

**Figure 4 Asylum applicant in Portugal, 2009-2018**



**Source: Author's own computation based on Eurostat data.**

To offer a responsible response to the refugee crisis, Portugal made an international commitment to host up to 10,000 asylum seekers through relocation from Italy and Greece and refugees through the resettlement of UNHCR-managed refugee camps. Unfortunately, the “Evaluation Report on the Portuguese Refugee Policy - Relocation Program”, delivered to the Portuguese Parliament, states that between December 2015 and November 2017, only 1,520 people arrived in Portugal, of which about 51% have already left the country.

Within the framework of the European Agenda for Migration (European, 2015), Portugal committed to reinstall in 2016 and 2017, a total of 191 refugees. Subsequently, under the EU-Turkey Declaration, Portugal assumed in its resettlement quota also the reception of Syrian refugees from Turkey. According to Immigration and Borders Service - SEF (2017), in 2017, 171 refugees were received, including 130 Syrian nationals from Turkey under the EU-Turkey Declaration and 41 refugees from Egypt and Morocco of other nationalities (e.g. Syrian, Sudanese, Eritrea and Ethiopian).

From those that have been resettled in Portugal, many have chosen to later abandon the country. The abandonment of the country by refugees is justified by the difficulties in language learning and cultural adaptation, as well as the nonexistence in Portugal of communities from Syria, Iraq and Eritrea.



**Table 2 Applications and granting of protection status at first instance in 2018**

	Applicants in 2018	Refugee status	Subsidiary protection	Rejection
<b>Total</b>	1,285	220	405	415
<b>Angola</b>	225	0	0	65
<b>Ukraine</b>	135	0	50	20
<b>Democratic Republic of the Congo</b>	130	0	5	100
<b>Guinea</b>	70	0	0	20
<b>Pakistan</b>	50	0	5	20
<b>Guinea-Bissau</b>	50	0	0	10
<b>Eritrea</b>	45	55	0	0
<b>Venezuela</b>	40	0	0	10
<b>Somalia</b>	40	5	0	0
<b>Comoros</b>	25	0	0	25
<b>Iraq</b>	15	20	85	5
<b>Syria</b>	10	65	230	0
<b>Afghanistan</b>	5	0	0	0

Source: Author's own computation based on Eurostat data.

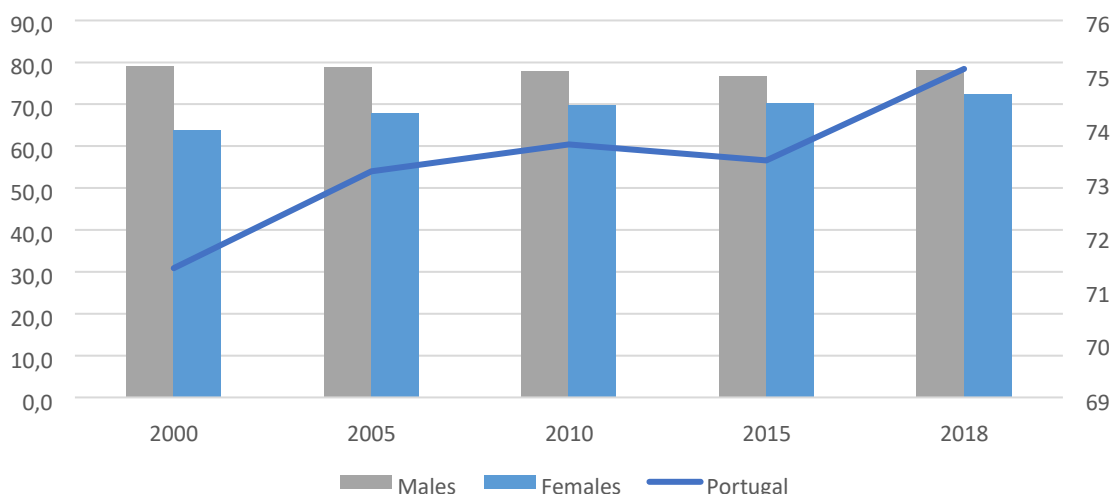
According to the UNHCR, Refugee Status Determination is the legal or administrative process by which governments determine whether a person seeking international protection is considered a refugee under international, regional or national law. Subsidiary protection is international protection for persons seeking asylum who do not qualify as refugees. In Europe, a person eligible for subsidiary protection status means a third-

country national or stateless who would face a real risk of suffering serious harm if s/he returned to the country of origin. As Table 2 shows from 1285 applicants only 220 received refugee status and other 405 qualified for the subsidiary protection, the others still await an institutional response.

The Portuguese Plan for the Reception and Integration of Relocated Refugees provided for the intervention of each participant in the following phases: proper identification and protection of persons in need of international protection particularly vulnerable; access to housing; access to health care; access to education; language training (Portuguese); access to training, recognition, validation and certification of competences; access to food; access to the labour market; access to community services; communication strategy with civil society; access to information and legal support; and document interpretation / translation. There are some cases of success of implementation of this programs such as in Lisboa, Sintra, Batalha, Guimarães and Alvito (ACM, 2017).

As Barslund, Busse, Lenaerts, Ludolph, and Renman (2016) suggest that the socioeconomic characteristics of the host country such as employment rate also influence the integration of refugees, it is important to refer that the employment rate in Portugal is higher for males than females. In 2018 the total percentage of employment rounded 75%, when considered active population with ages between 15 and 64 years old (fig. 5).

**Figure 5 Employment rate: total and per gender (%), 2000-2018**



Source: Author's own computation based on Eurostat data.

## 2. Presentation and discussion of the data

To proceed to a descriptive statistic some decisions about the data were made. First individuals whose records were incomplete were excluded, since it is necessary to have all information to estimate an explanatory model. Individual who had declined to provide their age and education were also discarded. Also, were not considered individuals with a sex change in the database. A problem with codification was noticed regarding the level of education and 170 observations were removed from the data set. Only individuals with ages between 15 and 64 years old were considered.

According to SEF, the so called “migration crisis” started in 2014 with more than 3.500 people dying trying to reach Europe by the Mediterranean Sea. Based on this, we have decided to consider migrants that arrived in Portugal between 2014 and 2019. We grouped the migrants into four categories: natives, “plop”, “refugees” and other migrants. In the natives group we considered citizens with Portuguese nationality only. In the “plop” group we have included all migrants that are originally from Portuguese official speaking countries<sup>2</sup>. The “refugee” group includes all migrants coming from the previously mentioned countries considered by the UN and SEF to be in crises situations<sup>3</sup>. The study will address these two groups separately since the literature suggests that language is a determining factor in successful integration, especially in the case of refugees (Dumont et al., 2016). In the last group are all other migrants arriving from countries do not belong to any of these two groups.

Institutional assistance was not considered as a differentiating factor between migrants because no refugee is included in the number of people receiving support from a job centre.

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<sup>2</sup> Brazil, Angola, Cape Verde, Guinea Bissau, Equatorial Guinea, Mozambique, Democratic Republic of São Tomé and Príncipe, Macao and East Timor

<sup>3</sup> Syria, Afghanistan, South Sudan, Burundi, Iraq, Nigeria, Eritrea, Somalia, Sudan, Democratic Republic of the Congo, Central African Republic, Venezuela and Yemen.

## Results

### 1. Descriptive Analysis

There are 151,657 individuals in the sample, corresponding to 65,4757 observations.

**Table 3 Descriptive Statistics**

	Natives	Migrants	Refugees	PLOP
<b>Age</b>				
16-24	17.97	19.74	27.69	25.63
25-34	15.29	38.82	33.85	30.36
35-44	22.58	24.34	24.62	28.41
45-54	23.89	11.84	9.23	11.98
>54	20.27	5.26	4.62	3.62
<b>Sex =1 if feminine</b>				
	52.74	52.63	53.85	55.71
<b>Marital Status</b>				
Single	38.76	54.61	55.38	46.52
Married	51.16	39.47	40.00	49.03
Divorced or legally separated	7.74	4.61	4.62	3.62
Widowed	2.35	1.32	0.00	0.84
<b>Employed</b>				
	64.42	62.50	36.92	49.58
<b>Formal Education</b>				
No education	3.38	.66	0.00	1.95
Basic	57.64	32.24	16.92	25.35
High School	22.12	32.24	46.15	42.90
College	16.86	34.87	36.92	29.81
<b>Type of Contract<sup>4</sup></b>				
Open-ended	65.40	29.47	37.50	33.15
Fixed term	14.71	44.21	41.67	44.94
Service Agreements and others	2.77	7.37	4.17	11.24
No information	17.12	18.95	16.67	10.67

Source: Author's own computation based on data from "Inquérito ao Emprego". All values in percentage.

<sup>4</sup> I only considered employed individuals

Regarding the descriptive statistics of our data, considering each group we can conclude that the majority of “Migrants”, “Refugee”, and “Plop” are younger than 34 years old while for natives 56% is younger than 44 years old and the mean in this group is 41 years old (8 years more than in the other groups).

**Figure 6 Histogram by sex and group**



**Source: Author's own illustration**

In Figure 6 the left-up histogram is related to natives, the up right to the migrants, down left to “Plop”, and down right to refugees. As is possible to verify natives have a right skewed distribution for both sexes which means most of them are over 40 years old (already seen in Table 3), while the other groups not. This is a revealing information as it demonstrates that the population in these groups is younger than that of the native population.

As it happens for the population in general, in all groups more than 50% of the observations are female. Concerning the marital status of the individuals, most natives and “Plop” are married, but the refugees and other migrants are predominantly single individuals. Employment without surprise is much higher for natives and “Plop” with only 37% of the refugees being employed.

Considering the formal education of the individuals, for the native group, 58% have completed the basic school (until 9th grade), whereas for other groups the majority as

completed high school or even college degree. As all refugees have some level of education, uneducated individuals were excluded from the econometric analysis.

When considering only the employed people, while more than 65% of natives have an open-ended contract, most migrants have fixed-term contracts, which already shows a disadvantage of employment stability between migrants and natives.

## 2. Empirical Analysis

As expressed before, model one is formulated to represent the probability of an individual being employed ( $y_i$ ), accounting for demographic, social and economic characteristics. Its formulation is the following:

$$y_i = \beta_0 + \beta_1 \text{sex}_i + \beta_2 \text{age}_i + \beta_3 \text{age}_i^2 + \beta_4 \text{maritalstatus}_i + \beta_5 \text{immigrant}_i + \beta_6 \text{formaleduc}_i + \varepsilon_i \quad (1)$$

where  $i$  is the individual and  $\varepsilon_i$  represents the disturbance term.

The Wald test for the hypothesis that all 11 coefficients of the model are zero is 95662.86, which is larger than the critical value. Thus, including these variables creates a statistically significant improvement in the robustness of the model.

Holding everything constant, for an average individual, the results presented in Table 4 indicate that being a woman decreases the probability of being employed by around 6.9 percentage points. With a change in one age group, the likelihood of being employed increases by approximately 0.4 percentage points (pp). Concerning being married as base category, being single, divorced or widowed, it decreases the probability of being employed by around 5.6pp, 2.2pp and 1.2pp. respectively.

**Table 4 Parameters and partial effects from Model 1**

	Model (1) Parameters	Model (1) Partial Effects
Gender	-0.571*** (-76.786)	-0.0692*** (-75.655)
Age	0.403*** (230.425)	0.00380*** (84.553)
Age2	-0.00465*** (-226.865)	
Single	-0.450*** (-40.583)	-0.0563*** (-38.172)
Divorced or legally separated	-0.192***	-0.0219***

	(-13.264)	(-12.582)
Widowed	-0.108***	-0.0120***
	(-4.481)	(-4.310)
Other Migrants	0.0241	0.00291
	(0.191)	(0.192)
Plop	-0.694***	-0.107***
	(-7.358)	(-6.064)
Refugees	-1.017***	-0.172**
	(-3.955)	(-3.106)
High-school	0.558***	0.0739***
	(60.894)	(62.277)
College	1.128***	0.123***
	(101.202)	(105.799)
<hr/>		
Log likelihood	-88191644.4	
Chi-squared	95662.9	
Pseudo R2	0.195	

Source: Author's own computation based on "Inquérito ao Emprego" 2011-2019.

Notes: Significance levels: \*, 10%; \*\*, 5%; \*\*\*, 1%. T Statistics in parenthesis. The number of observations is 654757. The dependent variable is employment status. The base category for gender is male; the base category for marital status is married; the base category for origin group is natives; the base category for education is basic education.

When we evaluate the hypothesis that a native individual has the same probability of being employed as a refugee, the chi-square test with 1 degree of freedom presents the value 9.65. with an associated p-value lower than 0.01. So, the null hypothesis of the absence of differences between natives and refugees is rejected. So that when comparing refugees with natives, the results were significant, and the model 1 points us that refugees are 17.2 percentage points less likely to be employed.



To understand the importance of the level of formal education in the integration of refugees in the labour market it was necessary to use a model that would explain the interaction of these two variables.

$$y_i = \beta_0 + \beta_1 \text{sex}_i + \beta_2 \text{age}_i + \beta_3 \text{age}_i^2 + \beta_4 \text{marital status}_i + \beta_5 \text{immigrants}_i + \beta_6 \text{formaleduc}_i + \beta_7 \text{immigrants}_i \times \text{formaleduc}_i + \varepsilon_i \quad (2)$$

The Wald test for the hypothesis that all 17 coefficients of the model are zero is 95784.69. which is larger than the critical value. Thus, including these variables creates a statistically significant improvement in the robustness of the model.

The results presented in Table 5 indicate approximately the same results as the Model 1 for gender, age and marital status. Holding everything constant, for an average individual, the results presented in Table 5 indicate that being a refugee decreases the probability of being employed by around 9 percentage points comparing to a native individual. Without surprise. refugees are the most harmed group in the results presented below. Even when comparing individuals within the same group for Plop and Refugees, more education does not result in higher probability of been employed as it happens for natives and other migrants. In this particular case having a college degree compared to being a high school graduate can decrease the probability of being employed by around 32 percentage points for a refugee and 21 percentage points for a Plop.

**Table 5 Parameters and partial effects from Model 2**

	Model (2) Parameters	Model (2) Partial Effects
Gender	-0.571*** (-76.825)	-0.0692*** (-75.686)
Age	0.403*** (230.515)	0.00380*** (84.559)
Age2	-0.00465*** (-226.946)	
Single	-0.450*** (-40.601)	-0.0562*** (-38.187)

Divorced or legally separated	-0.192*** (-13.258)	-0.0218*** (-12.576)
Widowed	-0.108*** (-4.446)	-0.0119*** (-4.277)
Other Migrants	0.0303 (0.121)	0.00428 (0.242)
Plop	0.0403 (0.235)	-0.0581*** (-3.628)
Refugees	-0.141 (-0.401)	-0.0905* (-2.308)
High-school	0.557*** (60.649)	0.0736*** (62.046)
College	1.136*** (101.528)	0.124*** (105.945)
Other migrant x High school	-0.174 (-0.550)	0.861*** (37.27)
Other migrant x College	0.235 (0.691)	0.943*** (76.06)
Plop x High school	-0.133 (-0.620)	0.867*** (58.60)
Plop x College	-1.936*** (-8.809)	0.656*** (21.23)
Refugee x High school	0.0421 (0.083)	0.866*** (20.57)
Refugee x College	-2.197*** (-4.442)	0.551*** (6.40)
N	654757	654757
Log likelihood	-88156940.5	
Chi-squared	95784.7	
Pseudo R2	0.196	

Source: Author's own computation based on "Inquérito ao Emprego" 2011-2019.

Notes: Significance levels: \*, 10%; \*\*, 5%; \*\*\*, 1%. T Statistics in parenthesis. The dependent variable is employment status. The base category for gender is male; the base category for marital status is married; the base category for origin group is natives; the base category for education is basic education.

To better understand the results, the model above presented was run for each group of formal education.

$$y_i = \beta_0 + \beta_1 \text{sex}_i + \beta_2 \text{age}_i + \beta_3 \text{age}_i^2 + \beta_4 \text{marital status}_i + \beta_5 \text{immigrants}_i + \varepsilon_i \quad (3)$$

The Wald test for the hypothesis that all 9 coefficients of the model are zero was. for all 3 sub models. larger than the critical value thus including these variables creates a statistically significant improvement in the fit of the model.

The results presented in Table 6 indicate that for an average individual with basic formal education *ceteris paribus* being a woman reduces the probability of being employed by 12 percentage points. As for an individual with a high school degree, being a woman decreases the probability in 4.7 percentage points. For a college graduated the reduction is 0.4 percentage points. This leads to the conclusion that, for women, higher levels of education result in a smaller differential in relation to men.

In the results of model 3, age changes for individuals with basic education are not significant and for formal education in high school or college there is an increase of 1.1 percentage points or 0.4 percentage points. respectively.

As in model 1, concerning the marital status, where married is the base category, being single, divorced or widowed decreases the probability of being employed in every formal education group.

With some surprise, there is an increase in the probability of being unemployed in the analysis of the group of refugees and natives with higher education, with the refugees being 39.7 percentage points less probable of being employed. These results contradict the expectation that a higher level of education leads to a higher rate of employment. As explained in the literature review, in what concerns refugees this can be explained by language barriers, especially in skilled labour. As for natives, the factors that explain these results are unclear.

The results for the employment of “Plop” compared to natives was as expected. This group of migrants are mainly primary sector workers (Caselli, Vallin, & Wunsch, 2005) and this kind of employment does not require a high level of education. With that in mind, it was expected for the low level of education “Plop” individuals to show a good employment rate.

statistically similar to the probability of being employed as a native individual. This is confirmed. As for the other level of education groups (within “Plop”) they are 1.4 percentage points and 32 percentage points less likely to be employed. respectively.

Several authors (Dumont et al.. 2016; Laurensyeva & Venturini. 2017; Matos. 2016) defend that the difference in the values of probability of refugees when compared to natives and “Plop” versus natives is explained by the influence of the knowledge of the country’s language in employment.

Within the refugee group there is a significant decrease in the employment probability for the individuals with college degrees or even higher education levels. Three possible explanations to this are: the lack of credibility for the employers related to the foreign institutions where refugees acquired their degrees; the existence of enough Portuguese graduates from national institutions in which employers place more confidence; or the lack of need to attract migrants to qualified work. again, due to the preference of employers for natives, without the conflict of lack of credibility of foreign qualifications or the linguistic difficulties.

Another point that this study wanted to emphasise was the gender gap visible between social groups. Native women are 6.9 percentage points less likely to be employed than a native man, as seen in Model 2. Refugee women are 29 percentage points less likely to be employed than a refugee man; and present a significant difference compared to native man – 33 percentage points.

**Table 6 Parameters and partial effects from Model 3 according to level of education**

	Model (3) Parameters Basic	Model (3) Partial Effects Basic	Model (3) Parameters High Scholl	Model (3) Partial Effects High Scholl	Model (3) Parameters College	Model (3) Partial Effects College
Gender	-0.778*** (-82.149)	-0.120*** (-79.302)	-0.379*** (-26.251)	-0.0470*** (-25.775)	-0.0508* (-2.531)	-0.00355* (-2.542)
Age	0.370*** (180.930)	-0.0000163 (-0.254)	0.480*** (120.057)	0.0111*** (93.947)	0.445*** (70.692)	0.00416*** (50.860)
Age2	-0.00431*** (-181.169)		-0.00563*** (-112.904)		-0.00494*** (-66.944)	
Single	-0.548*** (-37.593)	-0.0882*** (-34.224)	-0.331*** (-14.101)	-0.0406*** (-14.029)	-0.312*** (-11.095)	-0.0221*** (-10.721)
Divorced or legally separated	-0.204*** (-11.386)	-0.0295*** (-10.824)	-0.228*** (-6.873)	-0.0270*** (-6.476)	-0.142*** (-3.320)	-0.00938** (-3.171)
Widowed	-0.0666* (-2.542)	-0.00921* (-2.489)	0.149 (1.678)	0.0152 (1.776)	-0.368*** (-3.579)	-0.0267** (-3.091)
Other Migrants	0.00709 (0.030)	0.00108 (0.030)	-0.190 (-0.971)	-0.0253 (-0.912)	0.345 (1.480)	0.0209 (1.726)
Plop	-0.000312 (-0.002)	-0.0000475 (-0.002)	-0.104 (-0.777)	-0.0135 (-0.750)	-1.866*** (-13.370)	-0.270*** (-8.595)
Refugees	-0.216 (-0.622)	-0.0352 (-0.584)	0.00778 (0.020)	0.000967 (0.020)	-2.393*** (-6.606)	-0.397*** (-4.398)
N	370860	370860	159989	159989	123908	123908
Log likelihood	-50211345.0		-22948233.3		-14534577.0	
Chi-squared	55515.9		26491.6		9448.7	
Pseudo R2	0.174		0.213		0.122	

Source: own computation using “Inquérito ao Emprego” 2011-2019.

Notes: Significance levels: \*, 10%; \*\*, 5%; \*\*\*, 1%. T Statistics in parenthesis. The dependent variable is employment status. The base category for gender is male; the base category for marital status is married; the base category for origin group is natives; the base category for education is basic education.

## Conclusion

As Portugal is considered a hardly to not affected country by the migration crisis, but also, one of the most open countries to receiving refugees, the Portuguese government is willing to reach a consensus for the refugee crises management as a global response of the European Union (Fóti & Fromm. 2016).

Benček and Strasheim (2016) point out the influence of the media to control the narrative and public opinion as well as political discourses. This is a major point when trying to unify the European Union policies regarding this topic, because responsibilities should affect all member states and not just the ones in which the native population is more open-minded to the issue (Fernández-Huertas Moraga & Rapoport, 2015).

The results of this study go against the belief that refugees and natives are competing for the same jobs. This being particularly true for graduates, as refugees with a college degree (or more) are 39.7 percentage points less probability of being employed. Furthermore, the study suggests, refugees can even be the right solution to the shortage of labour force in some sectors (Temprano-Arroyo, 2018).

Based on the results of “Plop” (in which individuals with basic education have almost the same the probability of being employed as a native individual), one interesting policy to be implemented is a language and cultural program to integrate refugees (not only in the labour market but in the host community).

To conclude, it is not proven that higher level of education leads to a higher probability of being employed. However, in Portugal refugees with high school level are more probable to be successfully integrated in the labour market than those with a college diploma or only with basic education. These results can lead to the interpretation that policies to adjust the qualifications to jobs should be adopted.

For future investigation, it would be relevant to see the results from other countries in Europe and compare if in other countries a higher level of education can increase the probability of being employed. This would be a relevant indicator to support the development of policies and the uptake of decisions towards a common European Law and practices on the integration of refugees and other migrants.

## References

- ACM, A. C. p. a. M. (2017). Relatório De Avaliação Da Política Portuguesa De Acolhimento De Pessoas Refugiadas. Retrieved from [https://www.acm.gov.pt/documents/10181/27754/Relatorio\\_Acolhimento+Pessoas+Refugiadas\\_Dez.2017.pdf/d21546b3-7588-483d-92a3-fa8185d61b5b](https://www.acm.gov.pt/documents/10181/27754/Relatorio_Acolhimento+Pessoas+Refugiadas_Dez.2017.pdf/d21546b3-7588-483d-92a3-fa8185d61b5b)
- CM, A. C. p. a. M. (2018). *Destaques Estatísticos nº17*. Retrieved from <https://www.om.acm.gov.pt/documents/58428/584458/Destaque+Estat%C3%A0Dstico+OM+%2317+-+Refugiados.pdf/5bbd6a1d-fa5f-47c1-8395-b75a41a9e9c9>
- Arroyo, H. T. (2017). Encouraging the Employment of Refugees through Trade Preferences. *Robert Schuman Centre for Advanced Studies Policy Brief, 35*, 2017. doi:10.2870/489222
- Assaad, R., Krafft, C., & Yassin, S. (2018). Comparing retrospective and panel data collection methods to assess labor market dynamics. *IZA Journal of Development and Migration, 8*(1), 1-34. doi:10.1186/s40176-018-0125-7
- Aybars, A. İ., Copeland, P., & Tsarouhas, D. (2019). Europeanization without substance? EU–Turkey relations and gender equality in employment. *Comparative European Politics, 17*(5), 778-796. doi:10.1057/s41295-018-0125-2
- Babbie, E. R. (2010). *The practice of social research* (12th ed.): Wadsworth publishing company Belmont, CA.
- Bakker, L., Dagevos, J., & Engbersen, G. (2017). Explaining the refugee gap: a longitudinal study on labour market participation of refugees in the Netherlands. *Journal of Ethnic and Migration Studies, 43*(11), 1775-1791. doi:10.1080/1369183X.2016.1251835
- Baranik, L. E., Hurst, C. S., & Eby, L. T. (2018). The stigma of being a refugee: A mixed-method study of refugees' experiences of vocational stress. *Journal of Vocational Behavior*(105), 116-130. doi:10.1016/j.jvb.2017.09.006
- Barslund, M., Akgüç, M., Laurentsyeva, N., & Ludolph, L. (2017). Sharing Responsibility For Refugees And Expanding Legal Migration. 2017 *MEDAM Assessment Report On Asylum And Migration Policies In Europe*. Retrieved from <https://migrationpolicycentre.eu/docs/medam/2017-MEDAM-AssessmentReport.pdf>
- Barslund, M., Busse, M., Lenaerts, K., Ludolph, L., & Renman, V. (2016). Labour Market Integration of Refugees: A comparative survey of Bosnians in five EU countries. CEPS Special Report No. 155.
- Barslund, M., Di Bartolomeo, A., & Ludolph, L. (2017). Gender inequality and integration of non-EU migrants in the EU. *CEPS Policy Insights, CEPS, Brussels*.

- Barslund, M., Di Salvo, M., & Laurentsyeva, N. (2018). The impact of refugees on the labour market: a big splash in a small pond? CEPS Working Document No 2018/07.
- Bartolini, L., Gropas, R., & Triandafyllidou, A. (2017). Drivers of highly skilled mobility from Southern Europe: escaping the crisis and emancipating oneself. *Journal of Ethnic and Migration Studies*, 43(4), 652-673. doi:10.1080/1369183X.2016.1249048
- Battisti, M., Giesing, Y., & Laurentsyeva, N. (2019). Can job search assistance improve the labour market integration of refugees? Evidence from a field experiment. *Labour Economics*, 61(7292), 1-20. doi:10.1016/j.labeco.2019.07.001
- Bauer, T. K., Braun, S., & Kvasnicka, M. (2013). The economic integration of forced migrants: Evidence for post - war Germany. *The Economic Journal*, 123(571), 998-1024. . doi:10.1111/econj.12023
- Baum, C. F., Lööf, H., Stephan, A., & Zimmermann, K. F. (2020). Refugee immigrants, occupational sorting and wage gaps. *GLO Discussion Paper Series, Global Labor Organization (GLO)*, 1-60. Retrieved from <http://fmwww.bc.edu/EC-P/wp963.pdf>
- Becker, S. O., & Ferrara, A. (2019). Consequences of forced migration: A survey of recent findings. *Labour Economics*, 59, 1-16. doi:10.1016/j.labeco.2019.02.007
- Benček, D., & Strasheim, J. (2016). Refugees welcome? A dataset on anti-refugee violence in Germany. *Research & Politics*, 3(4), 1-11. doi:10.1177/2053168016679590
- Bevelander, P. (2016). Integrating refugees into labor markets. *IZA World of Labor*, 1-9. doi:10.15185/izawol.269
- Bevelander, P., & Pendakur, R. (2014). The labour market integration of refugee and family reunion immigrants: A comparison of outcomes in Canada and Sweden. *Journal of Ethnic and Migration Studies*, 40(5), 689-709. doi: 10.1080/1369183X.2013.849569
- Brell, C., Dustmann, C., & Preston, I. (2020). The Labor Market Integration of Refugee Migrants in High-Income Countries. *Journal of Economic Perspectives*, 34(1), 94-121. doi:10.1257/jep.34.1.94
- Carlson, M. M., McElroy, S. E., Aten, J. D., Davis, E. B., Van Tongeren, D., Hook, J. N., & Davis, D. E. (2019). We welcome refugees? Understanding the relationship between religious orientation, religious commitment, personality, and prejudicial attitudes toward Syrian refugees. *The International Journal for the Psychology of Religion*, 29(2), 94-107. doi: 10.1080/10508619.2019.1586067
- Carrera, S., & Gros, D. (2015). What priorities for the new European agenda on migration? . *CEPS Commentary, the 22nd of April*, 1-3.
- Ceritoglu, E., Yunculer, H. B. G., Torun, H., & Tumen, S. (2017). The impact of Syrian refugees on natives' labor market outcomes in Turkey: Evidence from a quasi-experimental design. *IZA Journal of Labor Policy*, 6(1), 5. doi:10.1186/s40173-017-0082-4



- Chadderton, C., & Edmonds, C. (2015). Refugees and access to vocational education and training across Europe: a case of protection of white privilege? *Journal of Vocational Education & Training*, 67(2), 136-152. doi:10.1080/13636820.2014.922114
- Cheung, S. Y., & Phillimore, J. (2014). Refugees, Social Capital, and Labour Market Integration in the UK. *Sociology-the Journal of the British Sociological Association*, 48(3), 518-536. doi:10.1177/0038038513491467
- Chimni, B. S. (2019). Global Compact on Refugees: One Step Forward, Two Steps Back. *International Journal of Refugee Law*, 30(4), 630-634. doi:10.1093/ijrl/eey067
- Codell, J. D., Hill, R. D., Woltz, D. J., & Gore, P. A. (2011). Predicting meaningful employment for refugees: The influence of personal characteristics and developmental factors on employment status and hourly wages. *International Journal for the Advancement of Counselling*, 33(3), 1-9. doi:10.1007/s10447-011-9125-5
- Commission, E. (2015). A European agenda on migration. Retrieved from [https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/european-agenda-migration/background-information/docs/communication\\_on\\_the\\_european\\_agenda\\_on\\_migration\\_en.pdf](https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/european-agenda-migration/background-information/docs/communication_on_the_european_agenda_on_migration_en.pdf)
- Connor, P. (2010). Explaining the refugee gap: Economic outcomes of refugees versus other immigrants. *Journal of Refugee Studies*, 23(3), 377-397. doi:10.1093/jrs/feq025
- Cortes, K. E. (2004). Are refugees different from economic immigrants? Some empirical evidence on the heterogeneity of immigrant groups in the United States. *Review of Economics and Statistics*, 86(2), 465-480. doi: 10.1162/003465304323031058
- Dahya, N., & Dryden-Peterson, S. (2017). Tracing pathways to higher education for refugees: the role of virtual support networks and mobile phones for women in refugee camps. *Comparative Education*, 53(2), 284-301. doi: 10.1080/03050068.2016.1259877
- Dean, J. (2018). Does it matter if immigrants work in jobs related to their education? *IZA Journal of Development and Migration*, 8(1), 1-42. doi:10.1186/s40176-017-0114-2
- Directive 2011/95/EU of the European Parliament and of the Council of the 13th of December 2011 on standards for the qualification of third-country nationals or stateless persons as beneficiaries of international protection. for a uniform status for refugees or for persons eligible for subsidiary protection. and for the content of the protection granted ) Retrieved from <https://eur-lex.europa.eu/legalcontent/EN/TXT/?uri=celex%3A32011L0095>
- Dryden-Peterson, S., Adelman, E., Bellino, M. J., & Chopra, V. (2019). The Purposes of Refugee Education: Policy and Practice of Including Refugees in National Education Systems. *Sociology of Education*, 92(4), 346-366. doi: 10.1177/0038040719863054
- Dumont, J.-C., Liebig, T., Peschner, J., Tanay, F., & Xenogiani, T. (2016). How are refugees faring on the Labour Market in Europe? A first evaluation based on the 2014 EU

Labour Force Survey ad hoc module. *European Commission DG Employment Working Paper, 1*, 1-43. doi: 10.2767/350756

- Dustmann, C., Fabbri, F., & Preston, I. (2005). The impact of immigration on the British labour market. *The Economic Journal, 115*(507), 324-341. doi: 10.1111/j.1468-0297.2005.01038.x
- Eggenhofer-Rehart, P. M., Latzke, M., Pernkopf, K., Zellhofer, D., Mayrhofer, W., & Steyrer, J. (2018). Refugees' career capital welcome? Afghan and Syrian refugee job seekers in Austria. *Journal of vocational behavior, 105*, 31-45. doi:10.1016/j.jvb.2018.01.004
- Emmenegger, P., & Stigwall, K. (2019). Women-friendliness in European asylum policies: The role of women's political representation and opposition to non-EU immigration. *Comparative Political Studies, 52*(9), 1293-1327. doi: 10.1177/0010414019830725
- Fasani, F., Frattini, T., & Minale, L. (2018). (The Struggle for) Refugee Integration into the Labour Market: Evidence from Europe. IZA Discussion Papers (11333).
- Fernández-Huertas Moraga, J., & Rapoport, H. (2015). Tradable Refugee-Admission Quotas (TRAQs), the Syrian crisis and the new European agenda on migration. *IZA Journal of European Labor Studies, 4*(23), 1-13. doi: 10.1186/s40174-015-0045-y
- Fóti, K., & Fromm, A. (2016). *Approaches to the labour market integration of refugees and asylum seekers*: Publications Office of the European Union, Luxembourg.
- Fransen, S., Vargas-Silva, C., & Siegel, M. (2018). The impact of refugee experiences on education: evidence from Burundi. *IZA Journal of Development and Migration, 8*(1), 1-20. doi:<https://doi.org/10.1186/s40176-017-0112-4>
- Freedman, J. (2016). Sexual and gender-based violence against refugee women: a hidden aspect of the refugee" crisis". *Reproductive health matters, 24*(47), 18-26. doi: 10.1016/j.rhm.2016.05.003
- Gericke, D., Burmeister, A., Löwe, J., Deller, J., & Pundt, L. (2018). How do refugees use their social capital for successful labor market integration? An exploratory analysis in Germany. *Journal of Vocational Behavior, 105*, 46-61. doi: 10.1016/j.jvb.2017.12.002
- Hammer, T. (2007). Labour market integration of unemployed youth from a life course perspective: The case of Norway. *International Journal of Social Welfare, 16*(3), 249-257. doi: 10.1111/j.1468-2397.2006.00467.x
- He, Y., Bettez, S. C., & Levin, B. B. (2017). Imagined community of education: Voices from refugees and immigrants. *Urban Education, 52*(8), 957-985. doi: 10.1177/0042085915575579
- Hek, R. (2005). The role of education in the settlement of young refugees in the UK: The experiences of young refugees. *Practice, 17*(3), 157-171. doi: doi.org/10.1080/09503150500285115
- Jestl, S., Landesmann, M., Leitner, S., & Wanek-Zajic, B. (2019). *Employment Gaps Between*

*Refugees, Migrants and Natives: Evidence from Austrian Register Based Labour Market Data.* Retrieved from <https://wiiw.ac.at/employment-gaps-between-refugees-migrantsand-natives-evidence-from-austrian-register-based-labour-market-data-dlp-5101.pdf>

Joonas, P. A., Lanninger, A. W., & Sundström, M. (2016). Reforming the integration of refugees: The Swedish Experience. *IZA Discussion Papers 10307*. Retrieved from <http://ftp.iza.org/dp10307.pdf>

Kone, Z., Ruiz, I., & Vargas-Silva, C. (2019). Refugees and the UK Labour market. Centre on Migration, Policy, and Society (COMPAS), 4, 1-49. Retrieved from <https://www.compas.ox.ac.uk/wp-content/uploads/ECONREF-Refugees-and-the-UK-Labour-Market-report.pdf>

Konle-Seidl, R., & Bolits, G. (2016). *Labour market integration of refugees: Strategies and good Practices: Study*. European Parliament.

Kramer, S., & Didden, B. (2017). Refugees and social security: the personal scope of the National Old Age Pensions Act (AOW) in the Netherlands. In ITEM. (Ed.), *Beyond the refugee crisis: A reflection from different perspectives on the Dutch case* (pp. 27-33). Maastricht University ITEM.

Labor Code Law No. 7/2009 Article 68- Admission of minors to work. point 2. Retrieved from <https://dre.pt/legislacao-consolidada/lc/75194475/201608230300/73439812/diploma/indice>

Lambert, H. (2017). An Introduction to the Common European Asylum System for Courts and Tribunals: A Judicial Analysis. In (pp. 42): Oxford University Press UK. doi: 10.1093/ijrl/eex041

Laurentsyeva, N., & Venturini, A. (2017). The Social Integration of Immigrants and the Role of Policy-A Literature Review. *Intereconomics*, 52(5), 1-8. doi: 10.1007/s10272-017-0691-6

Lauterbach, A. (1977). Employment, Unemployment and Underemployment: A Conceptual Re-Examination. *The American Journal of Economics and Sociology*, 36(3), 283-298. Retrieved from <http://www.jstor.org/stable/3486009>

Lavenex, S. (2001). The Europeanization of Refugee Policies: Normative Challenges and Institutional Legacies. *JCMS: Journal of Common Market Studies*, 39(5), 851-874.

Maddala, G. S. (1986). *Limited-dependent and qualitative variables in econometrics*. Cambridge university press.

Massey, D., Arango, J., Hugo, G., Kouaouci, A., Pellegrino, A., & Taylor, E. (1993). Theories Of International Migration - A Review And Appraisal. *Population and Development Review*, 19(3), 431-466. doi:10.2307/2938462

Matos, A. (2012). The careers of immigrants. *Centre for Economic Performance, London School of Economics and Political Science, CEPDP1171*. Retrieved from

<http://personal.lse.ac.uk/matos/jmp.pdf>

- Matos, A. (2016). Immigrant Language Fluency in the Low-Skilled Labor Market. *ILR Review*, 70(5), 1176-1195. doi:10.1177/0019793916682448
- Morrice, L. (2007). Lifelong learning and the social integration of refugees in the UK: The significance of social capital. *International Journal of Lifelong Education*, 26(2), 155-172.
- Muijs, D. (2010). *Doing quantitative research in education with SPSS* (2nd ed.): Sage.
- Naumann, E., Stoetzer, L., & Pietrantonio, G. (2018). Attitudes towards highly skilled and low-skilled immigration in Europe: A survey experiment in 15 European countries. *European Journal of Political Research*, 57(4), 1009-1030. doi:10.1111/1475-6765.12264
- OECD. (2015a). *How will the refugee surge affect the European economy?* Retrieved from <https://www.oecd.org/migration/How-will-the-refugee-surge-affect-the-European-economy.pdf>
- OECD. (2015b). Is This Humanitarian Migration Crisis Different. *Migration Policy Debates N. 7*, 1-15. Retrieved from <https://www.oecd.org/migration/Is-this-refugee-crisisdifferent.pdf>
- Oliveira, C. R., Peixoto, J., & Góis, P. (2017). A nova crise dos refugiados na Europa: o modelo de repulsão-atração revisitado e os desafios para as políticas migratórias. *Revista Brasileira de Estudos de População*, 34(1), 73-98. doi: 10.20947/s0102-3098a0016.
- Ottaviano, G. I. P., & Peri, G. (2012). Rethinking the effect of immigration on wages. *Journal of the European economic association*, 10(1), 152-197. doi: 10.1111/j.1542-4774.2011.01052.x
- Park, R. E., & Burgess, E. W. (1924). *Introduction to the Science of Sociology* (Vol. 574): University of Chicago Press Chicago.
- Pavli, A., & Maltezou, H. (2017). Health problems of newly arrived migrants and refugees in Europe. *Journal of Travel Medicine*, 24(4), 1-8. doi: 10.1093/jtm/tax016
- Peri, G., & Sparber, C. (2009). Task specialisation, immigration, and wages. *American Economic Journal: Applied Economics*, 1(3), 135-169. doi:10.1257/app.1.3.135
- Pernice, R. (1994). Methodological issues in research with refugees and immigrants. *Professional Psychology: Research and Practice*, 25(3), 207-213. doi: 10.1037/0735-7028.25.3.207
- Regulation (EC) No 862/2007 of the European Parliament and of the Council of the 11th of July 2007 on Community statistics on migration and international protection and repealing Council Regulation (EEC) Retrieved from <https://eur-lex.europa.eu/legalcontent/EN/TXT/?uri=CELEX%3A32007R0862>

- Rosa, E. d. (2019). Migrant women breadwinners in Italy during the crisis: improvement or trap? *Journal of Gender Studies*, 28(3), 288-303. doi:10.1080/09589236.2018.1441017
- Ruhs, M. (2019). Can labor immigration work for refugees? *Current History*, 118(804), 22-28. doi: 10.1525/curh.2019.118.804.22
- Ruiz, I., & Vargas-Silva, C. (2013). The economics of forced migration. *The Journal of Development Studies*, 49(6), 772-784. doi: 10.1080/00220388.2013.777707
- Ruiz, I., & Vargas-Silva, C. (2018). Differences in labour market outcomes between natives, refugees and other migrants in the UK. *Journal of Economic Geography*, 18(4), 855-885. doi: 10.1093/jeg/lby027
- Sarvimäki, M. (2017). Labor market integration of refugees in Finland. *VATT research reports*, 185. doi: 10.2139/ssrn.2921095
- Schweitzer, R., & Steel, Z. (2008). Researching refugees: Methodological and ethical considerations. In *Doing cross-cultural research* (pp. 87-101): Springer. doi: 10.1007/978-1-4020-8567-3\_7
- SEF, S. d. E. e. F. (2017). Relatório de Imigração, Fronteiras e Asilo-2016 [Immigration, Borders and Asylum-2016]. *SEFSTAT-Portal de Estatística*.
- Steigleder, Q., & Sparber, C. (2017). The effect of legal status on immigrant wages and occupational skills. *Applied Economics Letters*, 24(2), 80-84. doi: 10.1080/13504851.2016.1164811
- Temprano-Arroyo, H. (2018). Promoting labour market integration of refugees with trade preferences: Beyond the EU-Jordan compact. *Robert Schuman Centre for Advanced Studies Research Paper No. RSCAS*, 42. doi: 10.2139/ssrn.3293829
- UNHCR. (2018). *Global Trends Forced Displacement 2017* Retrieved from <http://www.unhcr.org/statistics/unhcrstats/5b27be547/unhcr-global-trends2017.html>
- UNHCR. (2019). *UNHCR Global Appeal 2018-2019*. Retrieved from <https://www.unhcr.org/publications/fundraising/5a0c05027/unhcr-global-appeal-2018-2019-full-report.html?query=global%20appeal%202018>
- Van Hear, N. (2010). Theories of migration and social change. *Journal of Ethnic and Migration Studies*, 36(10), 1531-1536. doi: 10.1080/1369183X.2010.489359
- Velasquez, M. G., & Velazquez, M. (2002). *Business ethics: Concepts and cases* (Vol. 111): Prentice Hall Upper Saddle River, NJ.
- Wehrle, K., Klehe, U.-C., Kira, M., & Zikic, J. (2018). Can I come as I am? Refugees' vocational identity threats, coping, and growth. *Journal of Vocational Behavior*, 105, 83101. doi: 10.1016/j.jvb.2017.10.010

Zwysen, W. (2019). Different patterns of labor market integration by migration motivation in Europe: The role of host country human capital. *International Migration Review*, 53(1), 59-89.