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Mind the Gap: Foreign Fighters and their Prospects on the OECD Labour Market

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Abstract

The rise of the world's most gruesome terror organization ISIS has agitated fear across the globe. Simultaneously, it has attracted more than 30 000 recruits from at least 86 different countries, many of whom originate from OECD member states. This dissertation investigates the underlying mechanisms driving people from OECD countries into joining the Islamic State. By cross-country analysis on 34 member states, this paper examines the relationship between foreign fighters and the labour market situation for immigrants by means of macro-level data on foreign recruits and socio-economic indicators.

The analysis found a positive and significant correlation between foreign fighters and the participation gap between natives and immigrants, suggesting that deficient integration, poor labour market prospects and relative deprivation serve as determinants of joining ISIS, and that extensive integration policy may serve as a remedy.

Keywords: Integration, OECD, Labour market, ISIS, Foreign fighters, Terrorism

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1. Introduction

Movies and pictures of ruthless mass executions, beheadings and torture explicitly displayed in front of the notorious Black Flag have spread like wildfire across the globe, consequently agitating fear far beyond the Islamic State and the Levant. The Syrian civil war and the incomprehensible atrocities committed in the region have forced millions of people to escape the devastation and destruction, seeking refuge in countries such as Lebanon, Turkey and Jordan (UNHCR). Simultaneously, more than 30,000 people from at least 86 different countries have deliberately travelled to the waging war zone, in order to align with the world's most gruesome terror organization ISIS and its affiliates, further extending and aggravating the brutalities, fighting another country's war (Barrett 2015, p. 4). These people are known as foreign fighters.

ISIS rose from the ashes of the Arab Spring and fed off the chaos prevailing in the deeply unstable region (Moubayed 2015, p. 116-117). Since its emergence it has by its merciless *modus operandi* gained territorial as well as ideological greatness, attracting individuals from all over the world to join the fight of global jihad and the establishment of an Islamic State. Although the majority of these global combatants partaking in the conflict originate from the Middle East and Arab countries, there are a considerable amount that have travelled from member states of the OECD, such as the United Kingdom, Belgium, France, Australia and the United States (Benmelech & Klor 2016, p. 1; Barrett 2014, p. 14). Following Abu Bakr al-Baghdadi's declaration of the caliphate in June 2014, the number of foreign fighters travelling from Western countries has more than doubled (Barrett 2015, p. 4). Five years later, in March 2019, the Syrian Democratic Forces (SDF) ultimately proclaimed the Islamic State (militarily) defeated (Sanders, 2019). However, ISIS's spokesman, Abu Muhammad al-Adnani, has called for lone acting Muslims worldwide to carry out attacks, pursuing the motto of remaining and expanding, *Baqiyah wa-Tatamadad* (Moubayed 2015, p. 197; 212). Despite the massive media coverage and extensive political debate this phenomenon has received, there is limited knowledge and empirical evidence on the underlying mechanisms driving people from the OECD to join the Islamic State.

A number of scholars have studied the roots and causes of terrorism and the reason why people join different insurgency groups (e.g. Krueger & Malečková 2003; Hassan 2001; Krueger & Laitin 2007). These studies are however often performed on domestic terrorists or transnational terrorists originating from, or residing in, countries close to the border of conflict and hence have a hard time explaining the foreign fighters travelling from OECD countries to join Daesh. Member states

of the OECD show higher economic development, welfare systems, and civil liberties than many of the countries that have been subject to previous studies (World Bank). This raises a number of questions regarding the integration efficiency in the OECD. How come economically developed OECD member states act as source countries and breeders of global terrorists? What makes individuals leave relatively wealthy and prosperous countries, their families and lives behind for a life of war, terror and death? What explains the discrepancy in number of foreign fighters across OECD countries? One possible explanation of this perplexing phenomenon could be poor and deficient integration processes and subsequent limitations of opportunities for immigrants.

The purpose of this dissertation is to examine the relationship between foreign fighters travelling from OECD countries and the labour market gap between natives and immigrants. By reviewing and consulting external research from various sources in combination with official figures, a unique dataset on the aggregate number of combatants travelling from the OECD region was constructed, acting as the foundation of this paper. Furthermore, this study utilizes macro-level data on socio-economic indicators in order to evaluate the mechanisms explaining the foreign fighter phenomenon. These indicators aim to seize the variation in the corresponding countries' labour market outcomes as measured by participation gaps. A fully conclusive and comprehensive analysis would require micro-level data with individual-specific parameters on the foreign recruits. It would furthermore necessitate a control group of people with similar background to the observed fighters, who had the opportunity to go to Iraq or Syria, but decided not to. As such detailed data are highly limited and ambiguous, this paper instead aims to provide a cross-country analysis of the discrepancy in the aggregated number of foreign fighters, in order to detect country-specific characteristics more prone to the phenomenon, as this is believed to be of value in further understanding the underlying socio-economic circumstances driving people into extreme radicalization.

Depending on the outcome of this analysis, it will inevitably result in distinct policy implications. If it turns out that there is no correlation between foreign fighters and labour market gaps, there might be reason to assume that people do not travel to Iraq or Syria to engage in ISIS as a result of the deprivation and marginalization they face on the labour market in their countries of residence. It would rather suggest that explanations such as ideology, the role of social media or possibly the search of adventure constitutes the main determinants of joining the Islamic State. If the results suggest that there indeed is a positive correlation between foreign fighters and labour market gaps, there might be reason to believe that the insufficiency of effective labour market

integration and the subsequent marginalization of immigrants risk driving people into radicalization. The intention of this paper is not to derive a unique and unprecedented explanation of why foreign fighters decide to join ISIS, as there are probably as many reasons as there are fighters. It should instead be regarded as an updated and extended contribution to the limited literature on this highly topical and urgent global issue.

This thesis is structured as to initially provide a succinct introduction of the historical and ideological context of which the jihadi movement and foreign recruits have sprung from. This includes briefly describing the philosophy on which the Islamic State is founded, following a sizable simplification of the political events leading up to the emergence of the terror organization and the phenomenon of foreign fighters. In the section following, the labour market situation for first- and second- generation immigrants will be introduced and linked to the observed characteristics of Daesh recruits. Thenceforth, previous literature on the subject are presented. The fourth section presents the obtained material and data utilized in the forthcoming analysis. Section five proceeds with presenting the results and findings of the econometric analysis. Following the econometric analysis, the obtained results and evidence are analysed and discussed. Finally, concluding remarks on the conducted study are presented.

2. Background

This section aims to provide a brief background on the foreign fighter phenomenon and the labour market situation of foreign-born. The first subsection presents a brief and compressed account of the foundation and circumstances that made the rise and prosper of the Islamic State and the foreign fighter phenomenon possible. The second subsection presents the labour market situation of first- and second-generation immigrants. The third subsection conceptualizes the connection between the phenomenon of foreign fighters and the mechanisms of the labour market.

2.1 Jihad and the Rise of Daesh

Despite ISIS being a rather novel terror organization, the ideology it rests on can be traced back to the early days of Islam and the death of the Prophet Muhammad in 632. The essence in this Salafist Islamic branch is the sacred goal of establishing a state governed by a caliph under the laws of Shari'a. The word Salafism originates from the word *Salaf*, or predecessor, and refers to the four caliphs of Sunni Islam, the successors of the Prophet Muhammad. Today's Salafi jihadists' objective is to revert the religion back to the glorious days of what they regard as the true Islamic faith. This interpretation of Islam does not only anathematize, and allow the beheading of infidels, but also excommunicate all Shi'a Muslims, apostates and other non-Sunnis (Moubayed 2015, p. XIII). According to this violent branch, an invasion of the land of Islam by infidels entails obligations as

a Muslim to help defending and protecting the Islamic soil and faith. Either by monetary contributions, by prayers or by fighting. By referring to the Quran, jihadi leaders may successfully use this discourse in order to mobilize combatants in their fight for jihad (Sageman 2004, p.2).

The US-led invasion of Iraq was, amongst others, a consequence of the twin tower attacks, and the Bush administration's following accusations of Saddam Hussein's alleged connections and support of al-Qaeda (Moubayed 2015, p. 116). Abu Musab al-Zarqawi was by the time a member of al-Qaeda and operated in Afghanistan. He later established al-Qaeda's local cell in the Fallujah region (Roy 2016, p. 127). The end of the war in Iraq and the subsequent dissolution of the Iraqi army, resulted in thousands of unemployed officers and soldiers with no use of their military profession, who gladly replaced their Ba'ath-berets to Salafi calottes. The former Ba'ath officers then joined forces with militant jihadist returnees from Afghanistan together with religious leaders, for whom the enemy were the Shi'a rather than the West. The Al-Zarqawi-founded organization in the Fallujah region was thereupon renamed the Islamic State of Iraq, ISI. Al-Zarqawi was hit in an airstrike in 2006 and Abu Omar al-Baghdadi became the new leader. He was killed in 2010, and Abu Bakr al-Baghdadi took up the presidency. Abu Bakr al-Baghdadi, Daesh's current self-proclaimed caliph, renamed the organization to ISIS or ISIL, as in the Islamic State of Iraq and Syria or the Levant, but after the declaration of the caliphate only refers to it as IS due to its lack of territorial definition (Roy 2016, p. 127-129; Gustafsson & Ranstorp 2017, p. 38).

The Sunnis have since the collapse of the Ottoman Empire in 1920 seen Lebanon, Syria and finally Iraq, in 2003, falling into the hands of the Shi'a Muslims. The Islamic State simply saw the opportunity in the vacuum that emanated following the US invasion of Iraq and preyed upon the disappointment and perceived neglect among the Sunni Arab community, as well as the aggravated conflict of the already inflamed Shi'a-Sunni divide (Roy 2016, p. 128; 141). The complex and multifaceted conflict in Iraq and Syria subsequently turned into a fertile territory and breeding ground for the emergence of militant movements. The magnitude of volunteers travelling to Iraq and Syria have resulted in the war zone turning into the epicentre of global jihad with foreign fighters joining from all over the world (Gustafsson & Ranstorp 2017, p. 14). A foreign fighter can be defined as

> an agent who (1) has joined, and operates within the confines of an insurgency, (2) lacks citizenship of the conflict state or kinship links to its warring factions, (3) lacks affiliation to an official military organization, and (4) is unpaid (Hegghammer 2010, p. 57-58).

The word foreign fighter may, however, be partially misleading as not all affiliates join insurgencies with the intent of actually fighting. In order for the Islamic quasi-state to function, a number of positions need to be filled, ranging from simple tasks to propaganda makers to qualified engineers. Affiliation with a terror organization, can however, regardless of the degree of involvement be considered as a war crime (Gustafsson & Ranstorp 2017, p. 21). Foreign fighters are not by any means a new, or uniquely Islam-linked phenomenon, but have been present in a number of conflicts over the course of history (Malet 2010, p. 97). What is unique about the conflict in Iraq and Syria, however, is the unprecedented scale, rapid mobilization rate and global recognition of the recruits travelling from all over the world to join Daesh and its affiliates (Dodwell et al. 2016, p. 1).

2.2 The Labour Market Situation for Immigrants

The foreign fighters travelling to Iraq or Syria from member states of the OECD are often young[1], alienated men with Muslim roots, mainly first- or second-generation immigrants (Moubayed 2015, p. 158-159; Roy 2016, p. 38). The decision of leaving relatively safe and affluent countries for a waging war zone sends alarming signals of the situation these individuals face in their home countries. This phenomenon could reflect the hardships and lack of opportunities many first- and second-generation immigrants face in OECD nations, with consequences taken to its extremes. Where a place such as the Islamic State provide them with an idea of a future brighter than the one most of them can expect at home, in the isolated margins of society (Hegghammer 2016, p. 14).

Immigrants face a number of challenges when arriving in a new country. Many of the barriers they encounter are related to factors such as language skills, social capital, social and cultural norms as well as the translation and transferability of educational attainment and labour market experience, consequently making them less eligible for certain positions on the labour market. However, even after controlling for migrant-specific variables like immigration status and duration of stay in the country, many OECD countries still present worse labour market outcomes for immigrants vis-à-vis natives. In some countries, the unemployment rate of immigrants is more than twice as high as those of natives (Jean et al. 2010, p. 15). In addition, immigrants who manage to enter the labour market are more likely to hold temporary and short-term contracts. Differently put, immigrants simply often act as the outsiders of the OECD labour market (Jean et al. 2010, p. 24). Furthermore, second-generation immigrants often show worse educational outcomes than native-born with native parents in many countries, resulting in a more challenging starting point, consequently

[1] The average age of foreign fighters has been estimated to 25 (Moubayed 205, p. 159)

affecting their prospects on the labour market (Jean et al. 2010 p. 25; OECD 2017, p.2). This have been evident in most European OECD countries. The participation rates of second-generation immigrants are often lower, especially among those with parents from low-income countries (OECD 2010, p. 11).

Although there are multiple dimensions to the integration of immigrants in OECD countries, the one concerning the labour market is highly crucial as it conditions other elements of the integration process due to the economic consequences it entails (Jean et al. 2010, p. 15). If these labour market disadvantages and the resulting relative deprivation among immigrants help explain the radicalization and the affiliation with the Islamic State, it should be seen as of even bigger concern.

2.3 Conceptual Framework

The multiple barriers faced by immigrants in the social and cultural domain as well as on the labour market across OECD countries may spur consequential feelings of alienation, exclusion and perceived discrimination. In addition, as people tend to identify themselves by their social context, of belonging to a group, religion or culture of which they have more in common with, it could be assumed that immigrants' feelings of marginalization may push them closer to their religion or ethnicity and further away from the country in which they feel unwelcomed and deprived (Malet 2013, p. 21; Benmelech & Klor 2016, p. 3). The Islamic State might thus serve as a haven for some of the alienated Muslims in secularized OECD countries.

A result of immigrants' poor labour market opportunities and outcomes in combination with the social exclusion they might face is that it, in addition, drastically lowers the opportunity costs of leaving for Iraq or Syria, vis-à-vis people with brighter labour market prospects, the ones with more to lose. These assumptions can be pertinent without necessarily implying that the actual foreign fighters are poor, uneducated or marginalized. Irrespectively if the foreign recruits themselves belong to an unemployed or disadvantaged group on the labour market, or in society in all, the general situation of immigrants can apply regardless. With reference to a "horizontal" explanation, as explained by Hegghammer (2016) and indirectly by Hassan (2001), the radicals that are not themselves poor or disadvantaged usually identify with, or belong to a group that is, and are consequently driven by the oppression endured by their fellow people, which can be attributed to systematic injustices (Hegghammer 2016, p.11).

The assumption is that countries with higher participation gaps between natives and foreign-born will have more foreign fighters. This is assumed to hold due to the multiple disadvantages immigrants face in OECD countries. The various dimensions, mechanisms and consequences of deficient integration processes, poor labour market opportunities and subsequent relative deprivation lower the opportunity costs and serve as drivers to join the Islamic State.

3. Literature Review

This section provides a presentation of existing literature on terrorism, terrorists and foreign fighters as well as studies on immigrants' situation and prospects on the labour market. The first subsection concerns the roots of terrorism and the choice of engaging in terrorist insurgencies. The second subsection presents a short account of previous research on immigrants', and in particular Muslims', situation on the labour market.

3.1 The Roots of Joining Terrorist Networks

There are extensive literature focused on terrorism, terrorists and terror attacks. Yet, there is still vigorous debate on the determinants of radicalization and the affiliation with transnational terror networks. The general view often seems to be that poverty serves as the main driver of terrorism (e.g. Mitra 2008). Other scholars, however, suggest the contrary, that terrorists usually are to be found in the wealthier part of the income distribution (e.g. Hassan 2001; Sageman 2004). A number of studies also suggest that there is no obvious correlation between terrorism and economic deprivation (e.g. Krueger & Malečková, 2003; Krueger & Laitin, 2007). Krueger and Malečková (2003) have found that terrorists are more likely to origin from countries that lack of civil rights, which they suggest indicate that terrorism is a political rather than an economical phenomenon. By cross-country, multivariable analysis they compare Hezbollah members and Palestinian suicide bombers and found no direct correlation between poverty, education and terrorism. Their findings imply that a reduction in poverty or an increase in education is not likely to reduce terrorism on an international level, as the correlation they found was weak and indirect (Krueger & Malečková 2003, p. 142). Sageman found that members of al-Qaeda were mainly educated, middle class men (2004, p. 96). The same pattern was found in a quantitative study performed on nearly 250 militants engaged in the Palestinian cause (Hassan, 2001). By conducting interviews between 1996 and 1999 on 250 militants and failed suicide bombers engaged in the Palestinian cause, Hassan found that none of the terrorists were deprived or uneducated, but if anything, rather the contrary.

Krueger and Laitin (2007) have tracked U.S. State Department data on terrorist events and ran negative binomial regressions for the period 1997 to 2002. They use the log of population, log of GDP per capita and GDP growth as control variables. In addition, they control for variables such

as civil liberties and political rights as well as ethnic and religious fractionalization. Their results indicate that, on a transnational level, international terrorists usually originate from politically oppressed states and operate against wealthier countries. Furthermore their results imply that liberal democracies are less likely to be producers of transnational terrorists (Krueger & Laitin 2007, p. 16; 18). Lee (2011) argues that the young men joining insurgency groups generally belongs to the lowest rank of the wealthiest part of society and that the higher opportunity costs associated to violence for people in the richer part of the distribution makes them avoid it. Furthermore, Lee suggests that this entails that people joining terrorist organizations tend to be educated and politically involved, but marginalized with a lower social position as measured in levels of education and labour market outcomes (Lee 2011, p. 204). Moreover, he suggests that people who participate in violence can be found in the lower tail of the social status distribution in richer countries, and have higher social status in poor countries, as the thresholds of opportunity costs are of different percentiles in rich respectively poor countries (Lee 2011, p. 210).

It is difficult, however, to apply the findings from these studies on the circumstances of foreign fighters travelling from OECD-countries for a number of reasons. Firstly, many of these studies were conducted on combatants already in, or close to the conflict stricken regions and countries, making the relationship between the combatants and the destination more symmetric compared to fighters travelling from the OECD countries. Secondly, recruits already in, or close to the war zone are likely to have lower alternative costs than the ones travelling from more remote countries. The transportation costs are higher as well as the emotional costs, being further away from home. Third, studies proving that terrorists are mainly high-educated, wealthy and stable are usually conducted on regional terrorists in countries of political conflicts (e.g. Krueger & Malečková, 2003; Krueger & Laitin, 2007; Hassan 2001). These may differ significantly from global terrorists, and in particular, foreign fighters. People close to the Iraqi and Syrian border may be more directly affected by the conflict and benefit from engaging in violent terrorism if they have an underlying political agenda and an expected political gain. Foreign recruits from remote OECD countries are not directly affected by the political events in Iraq and Syria and hence do not benefit politically from engaging in the conflict (Hegghammer 2010, p. 63). Thus, assuming that the results from these studies are applicable on this particular phenomenon, without further examination, may be a serious fallacy.

However, Dodwell et al. (2016) have by access to primary source personnel records on foreign fighters, compiled a comprehensive report on Daesh recruits. Despite the records not covering the total flow of the individuals travelling to Iraq and Syria, the report provides valuable data and

insights of the combatants on individual-specific level. Their evidence suggest that the average foreign fighter is 26 to 27 years of age. Many of the fighters reportedly had relatively high educational attainment, but with low-skilled occupational positions. A majority of them were students or held a low-skilled job prior to leaving for Syria (Dodwell et al. 2015, p. 12-14; 23). Jelil et al. (2018), have with the same records assessed a dataset on 2987 IS recruits from 183 different countries. By panel regressions, controlling for country- and education-level fixed effects, they have estimated the propensity of joining Daesh between, and within, the fighters' countries of origin. Their findings imply that deprivation as measured in labour market outcomes can be a driver for radicalization and joining Daesh (Jelil et al. 2018, p. 21).

Benmelech and Klor (2016) have conducted an analysis of the foreign fighter phenomenon and its connection to economic, political and social conditions. Their study utilizes macro-level data on a number of socio-economic indicators compiled from the World Bank, UN and Freedom House's Political Rights Index. In addition, they use indicators on ethnic, linguistic and religious fractionalization. These indicators are combined with data on foreign fighters compiled from the Soufan Group. Furthermore they analyse, by means of a probit regression, the likelihood of foreign fighters joining ISIS across countries on the intensive margin. Their findings indicate that economic conditions are not the root of the foreign fighter phenomenon, as many of the combatants originate from economically developed and democratic countries. Instead they suggest that the explanation of transnational IS affiliation is the difficulties of assimilating into homogenous countries (Benmelech & Klor 2016, p. 2). Verwimp (2016) have conducted a study in line with Benmelech and Klor's, which, by cross-country analysis, examines the socio-economic effects on foreign fighters in the EU. The socio-economic data focuses on labour market and education gaps between non-EU immigrants and natives in Europe, as measured in unemployment and unemployment gaps and PISA math test scores. These differences are later correlated with number of foreign fighters per million inhabitants and per million non-EU immigrants. Verwimp uses data from Eurostat and the European Union Labour Force Survey (Verwimp 2016, p. 70). He finds that larger gaps in both education and labour market outcomes correlate positively with the number of foreign fighters.

This paper have taken inspiration from Benmelech and Klor (2016) and Verwimp (2016) but aims to extend the analysis with multiple regressions and additional control variables with primary focus on the OECD labour market, where a gap in the literature emerges. This thesis aims to fill this gap with a unique dataset on foreign fighters. Verwimp's paper consists of 14 observations, and only

reports bivariate regressions which results in difficulties in deriving a robust conclusion, and even less, a causal relationship between the variables and potential co-variation of other variables.

3.2 Immigrants' and Muslims' Labour Market Prospects

There are multiple difficulties faced upon immigrants on the labour market, something seen in virtually all OECD countries. This can partly be explained by factors such as language proficiency, lack of social capital, lack of-, or difficulties in translating educational attainment. But even when controlling for these factors, studies have found that a significant difference in labour market outcomes between natives and immigrants persists (Jean et al. 2010, p. 15).

Despite the difficulties of distinguishing the impact of religion from the one of ethnicity of people with immigrant backgrounds, several studies have suggested that Muslims in Western Europe countries are particularly disadvantaged and often face ethnic and religious penalties. Studies have moreover shown that Muslim men and women in particular fare worse on the labour market (e.g. Heath & Martin 2013; Connor & Koenig 2015; Lindemann & Stolz 2018). The most disadvantaged group of immigrants on the European labour market have been shown to originate from Islamic countries (Connor & Koenig 2015, p.191). Connor and Koenig's (2015) study compares Muslims and non-Muslims in Europe. Their findings suggest that 40% of the employment variance between Muslims and non-Muslims can be explained by differences on individual level, mainly consisting of migration-related factors. A considerable share of the employment gap however, can be explained by perceived discrimination. In addition, they compare second-generation Muslims with non-Muslims without migration background. Their results suggest, both with and without accounting for human capital, a significant Muslim penalty among the second-generation Muslims (Connor & Koenig 2015, p. 191; 193). Indicators on Muslim religiosity and value orientations had a hard time explaining these differences. The variables with strongest explanatory effect were the individual perceptions of belonging to a marginalized group (Connor & Koenig 2015, p. 193). Other studies have presented evidence on labour market discrimination of Muslims, where immigrant Muslim-sounding names are less likely to receive a job interview than immigrants with Christian-sounding names, presenting unambiguous evidence of the penalties and discrimination Muslims face on the labour market (e.g. Adida et al. 2010).

The disadvantages faced by immigrants are in addition, as previously stated, often transmitted down to their offspring and studies have shown that second-generation Muslims, in particular, are more likely to be unemployed (e.g. Heath et al., 2008; Lessard-Phillips et al., 2012). Heath and Martin

(2013) have studied the labour market in the United Kingdom using data from 2005 and 2006 Annual Population and Labour Force Surveys on the working age population. By logistic regressions they estimate the effect of ethnicity and the effect of ethnicity and religion and later estimate the effect with an ethno-religious variable (Heath & Martin 2013, p. 1009; 1013). Their analysis suggests that Muslims have statistically significant lower employment rates and higher rates of economic inactivity. In short, Muslims face large disadvantages on the labour market compared to their co-ethnics belonging to other religions (Heath & Martin 2013, p. 1019; 1024).

4. Empirical Analysis

This section presents the empirical framework. The first subsection describes the dataset used in the forthcoming econometric analysis. The second subsection presents the limitations of the dataset. This was considered necessary due to the many insufficiencies that occur in the proceedings as a result of the nature of this matter, as well as the small sample. The third subsection describes the different variables assessed in the econometric analysis.

4.1 Data

The data on foreign fighters utilized in the analysis is a combination of existing reported numbers as well as supplementary figures compiled through research and consultation of various sources, creating a unique dataset on foreign recruits. Table 1 presents the total number of foreign recruits from OECD countries. The data were primarily compiled from the latest report issued by the Soufan Group and includes estimates obtained from governmental authorities and officials, United Nations as well as academic research studies (Barrett 2015, p. 5). The data have been used in reports published by the United Nations as well as the Radicalization Awareness Network (UN 2018; RAN 2017). Out of 36 OECD member states, figures from the Soufan Group were found on 21 of these countries. Where data were missing from the Soufan Reports, additional research from external sources were consulted, collected and assessed to fill out the blank spaces in the sample. However, since data on the matter are scant, there are naturally possible sources of error, as with any data of this nature.

The Czech Republic and Lithuania are said to have been two of the very few countries not encountered with the foreign fighter phenomenon (van Ginkel & Entenmann 2016, p. 49). However, the Prague Daily Monitor has reported that 11 people have left the Czech Republic and travelled to Syria in 2017 to join Daesh (Prague Daily Monitor, 2018). The Czech Republic was thus estimated to have 11 foreign fighters whereas no additional data were found on Lithuanian foreign fighters. Van Ginkel & Entenmann's estimates were used for Lithuania. As for Greece, it has been estimated that between 80 to 100 people have had connections to Islamist extremist

groups, and that the amount could even exceed that. As a result of the refugee crisis, Greece became an influx passage for hundreds of thousands of migrants and simultaneously a transit and re-entry point for facilitating potential travelling foreign fighters. The country has not encountered issues with home grown radicalization, but the massive immigration flows and its geographic location in relation to Turkey is regarded as some cause for concern (Counter Extremism Project, p. 3). This entails difficulties in obtaining a satisfactory and plausible estimate of how many to be counted as "Greek" foreign fighters. A broad definition would presumably give Greece a disproportionally large share of jihadists and no other official figures have been reported. Greece was therefore omitted from the sample.

The minister of the Estonian Interior, Katri Raik, has spoken to media about the issue of returnees and the number concerning Estonian foreign fighters was estimated to be 10 (ERR News, 2019). According to Icelandic authorities there are no known militants travelling to Iraq or Syria from Iceland (FATF 2018, p. 70). However, the Iceland Monitor has reported than one Icelander possibly has joined the Islamic State (Iceland Monitor, 2016). Sources have found that 20 to 40 Polish citizens are estimated to have travelled to Iraq or Syria to engage in the jihadi movement. 10 Estonian foreign fighters were added to the sample as well as the median estimation of 30 Polish militants. At least 2 people have travelled from Latvia to Iraq or Syria to join Daesh and were hence added to the dataset (van Ginkel & Entenmann 2016, p. 45). 6 people prior residing in Luxembourg have reportedly been travelling to Iraq or Syria to fight for the Sunni extremist group (van Ginkel & Entenmann 2016, p. 46). 6 Slovakian residents and 3 Slovenian citizens have reportedly been travelling to Syria in order to join Daesh and were added to the sample (van Ginkel & Entenmann 2016, p. 48). There is certain ambiguity in the number of Hungarian foreign fighters. Hungary has inevitably acted as a transit point for transnational combatants, but there are no confirmed figures on Hungarian fighters (Crime Terror Nexus 2018, p. 11). One Israeli source, however, has stated that about a dozen Hungarian citizens have travelled to Syria to participate in training camps[2] (ICIT 2014, p. 71). They were added to the dataset.

[2] All figures of this matter, are subject to various levels of uncertainty, but need not be neglected as they may be indicators of valuable information. However, it should be noted that the Israeli sources may, due to political reasons, be subject to certain levels of biasedness.

Table 1. Foreign Fighters who Have Gone to Syria or Iraq
Total Estimates

COUNTRY	Number of Foreign Fighters	Last Update	Source
1. Australia	>165	May 2017	Soufan Group
2. Austria	296	December 2016	Soufan Group
3. Belgium	528	October 2017	Soufan Group
4. Canada	185	January 2017	Soufan Group
5. Chile	0		
6. Czech Republic	11	May 2018	Prague Daily Monitor
7. Denmark	>145	February 2017	Soufan Group
8. Estonia	10	March 2019	ERR News
9. Finland	>80	February 2017	Soufan Group
10. France	1910	August 2017	Soufan Group
11. Germany	915	March 2017	Soufan Group
12. Greece	-		
13. Hungary	12	June 2013	ITIC
14. Iceland	1	April 2016	Iceland Monitor
15. Ireland	30	November 2015	Soufan Group
16. Israel	60	August 2017	Soufan Group
17. Italy	110	October 2017	Soufan Group
18. Japan	9	March 2015	Soufan Group
19. Korea	-		
20. Latvia	2	August 2015	ICCT
21. Lithuania	0	August 2015	ICCT
22. Luxembourg	6	August 2015	ICCT
23. Mexico	0		
24. Netherlands	280	February 2017	Soufan Group
25. New Zealand	5-10	March 2015	Soufan Group
26. Norway	90	September 2016	Soufan Group
27. Poland	20-40		ICCT
28. Portugal	12		ICCT
29. Slovakia	6		ICCT
30. Slovenia	3	October 2015	ICCT
31. Spain	204	July 2017	Soufan Group
32. Sweden	300	September 2016	Soufan Group
33. Switzerland	70	February 2017	Soufan Group
34. Turkey	1500	June 2016	Soufan Group
35. United States	<129	September 2017	Soufan Group
36. United Kingdom	850	February 2017	Soufan Group

There were no official data found on neither Mexico nor Chile. Barrett's report states that there have been people travelling from Chile, but that no official numbers were found in neither the first nor the second, updated, report (Barrett 2014, p. 13; Barrett 2015, p. 10). Additional research proved no signs of such statements. However, Muslims in Latin America constitute only one percent of the population. A study made by Ozkan (2017) explains the absence of Daesh in Latin America with factors such as low political participation rates and a strong superior Latino identity. Despite there being Muslims in the region, ISIS is not regarded as to pose a threat or attract recruits (Ozkan 2017, p. 285). What, however, might be a cause of confusion, is the IS recruits of Chilean descent. For instance Bistian Vasquez and Amanda Gonzales, both second-generation Chilean immigrants, who travelled to Syria to affiliate with Daesh (van Der Speek 2019). They are hence not assured be considered Chilean foreign fighters, as the circumstances in Chile most likely had little to do with their decision to join Daesh. With reference drawn from Ozkan's study and the lack of alternative evidence, the Chilean and Mexican count will be estimated to zero, which is considered a qualified guesstimate in the context. No official data were found on Korean foreign fighters. Korea will thus be omitted from the sample.

4. 2 Limitations

The nature of this matter inevitably involves a number of challenges and weaknesses which require caveats. The sources may be subject to different levels of uncertainty. As there is of today no official numbers on foreign fighters, without access to intelligence data, the Soufan Group's reports was used as the primary source despite the impossibility of ascertaining accuracy of the figures. There is the risk of the numbers collected not completely corresponding to the actual number of foreign recruits. Different sources use different measurements and definitions when counting the number of foreign fighters. Some may refrain from reporting deceased, returnees or detained fighters whereas others may provide an aggregated estimate. There can also be disparities in the judgment of nationality of the combatants. This depends on whether to measure fighters according to citizenship, permanent residence or last state of residence prior to departure. The figures may also have been collected within different timeframes. The additional self-compiled estimates may also suffer from certain degrees of uncertainty, emphasizing that the numbers are estimates, and not definite figures.

In addition, the limited sample size in the analysis encounters a number of statistically related consequences. It may entail low statistical power and inflated explanatory strength to the independent variables. It can also result in insufficiency of reflecting the asymptotic properties of

the OLS regressions and will consequently not provide a perfectly statistically representative and exhaustive analysis of the phenomenon. Reiterating and emphasizing that these numbers are mere estimates, and the best ones accessible, they are regarded sufficient within the scope of this study with the aim of obtaining a generic quantitative overview of the disparities in OECD member states acting as source countries of foreign fighters. These limitations notwithstanding, this paper can still provide valuable indicators on the underlying mechanisms of the phenomenon of foreign fighters.

4.3 Description of Variables

As the group of relevance in this paper is the one originating from, or residing, in OECD member states, data were mainly compiled from OECD's database, and in lesser extent Eurostat and UN's databases. The average foreign fighter is reportedly a man in his twenties, usually first- or second-generation immigrant, often of Muslim roots[3], making this specific profile of particular interest in the analysis. Data on second-generation immigrants were however limited and not available for all member states. Neither were data on Muslim's labour market outcomes. Due to these limitations, data on working age immigrants were primarily utilized. With reference to the horizontal explanation[4], however, a cross-country comparison of the labour market outcomes on first generation immigrants was regarded compatible to serve as a generic indicator of the integration efficiency in OECD countries.

Many of the variables concern different time frames but as the purpose of this thesis is to provide a cross-country assessment of the OECD countries and their number of foreign fighters, which have continued to flow into Iraq and Syria over time, the slight difference in reference years should not amount to any crucial difference in outcome of the analysis.

The independent variable, or key variable, which is of highest level of interest in the course of the analysis is the one concerning the labour market gap between natives and immigrants, denoted $Participation\ gap_c$. This gap does not only act as a measurement of immigrant's labour market situation, but can also serve as an indicator of their relative disadvantage compared to natives. Data on participation rates between natives and foreign-born were collected from OECD's database and provide numbers on participation rates of the years 2015, 2016 and 2017. As the figures on foreign fighters are an aggregate of combatants travelling over time, and do not refer to any specific time frame, an average of the participation gaps was used. The foreign-born labour force participation

[3] See section 2.1
[4] See section 2.3

rate is measured as the number of foreign-born in employment divided by the total foreign-born population in working age, i.e. 15 to 64. The native-born participation rate is the corresponding calculation on the working age native-born population (OECD). The participation rates are presented in percentage and the gap was calculated as the difference between native-born participation rate and foreign-born participation rate. In order to estimate the effect of unemployment, unemployment of immigrants was added as complementary potential explanatory variable. Data on unemployment were collected from OECD's database and an average of 2015, 2016 and 2017 was constructed.

As many of the foreign fighters are reportedly of Muslim roots, and as the IS movement is founded on radical Salafism or Islamism, the size of Muslim population might affect the number of foreign fighters. Muslim population was hence included as a control variable. Data on Muslim population were collected from Pew Research Centre. The count of religion is always subject to some levels of uncertainty as not all countries register these form of statistics. Pew Research Centre has published estimates of religious composition by country year 2010 to 2050. The year of reference used as the control variable was 2010 as it was the closest to present year available (Pew Research Centre, 2017). Data on total population in thousands were collected from the UN database, utilizing the medium-variant measurement. This is the measurement UN mainly used in their 2017 Revision, and is thus considered a reliable and valid measurement (UN, 2017).

Furthermore, the countries distance to the Syrian border, measured in kilometres, was added as a control variable as it is reasonable to assume that this may be of crucial relevance when deciding whether to travel to the Islamic State or not, as a higher distance implies a higher alternative cost for the potential recruits. United Nations Human Development Index (HDI) was included to control for the well-being of the population and affluence across countries. HDI is measured with data on health, education and income. The data concern the year 2017. The Gini coefficient of each country concerning year 2015 was also assessed and collected from the World Bank database. Despite the Gini coefficient not providing any information of the inequality within countries between natives and immigrants, it is an indicator of the overall inequality. A high Gini coefficient, and hence high inequality may, with regard to immigrants' often poor labour market outcomes, entail a worse situation for immigrants in the respective countries. OECD's data on GDP were also used as an indicator of economic development, as measured in current US dollars, 2016.

Educational attainment level gaps between natives, immigrants and second-generation immigrants were also controlled for. These figures were compiled from OECD's database. The levels of educational attainment were divided into low, medium and high and was available for natives, first-generation immigrants and second-generation immigrants. Low education refers to less than primary, primary and lower secondary school. Medium education refers to upper secondary and post-secondary education, and high education refers to short-cycle tertiary, bachelor or higher degree. The gaps were calculated as the difference between the natives level of educational attainment and first and second-generations corresponding levels of educational attainment. In addition, PISA reading test scores of 2015 were used in order to compare the differences between natives and first- and second-generation immigrants reading and writing proficiency. PISA test scores might provide an idea of the different group's respective starting points, as indicators on their future labour market outcomes. The gap was calculated as the difference in test scores between natives and immigrants and as the difference in test scores between natives and second-generation immigrants. PISA scores were not available for neither Poland nor Japan.

Indicators on ethnic, linguistic and religious fractionalization were compiled from Alesina et al. (2003). These measurements are indicators of the heterogeneity in a country, and calculates the probability that two randomly selected people from a given country will not belong to the same ethnic, linguistic or religious group (Alesina et al. 2013, p. 192). Such indicators can be of value in the analysis, as homogenous OECD countries can be expected to have less effective integration of immigrants (Benmelech & Klor 2016, p. 3). Benmelech and Klor stated that all three variables were highly correlated. However, by conducting a Pearson's coefficient correlation test, it was found that only ethnic and linguistic fractionalization were highly correlated, as shown in Table A in appendix. Religious fractionalization was however not significantly correlated with neither ethnic nor linguistic fractionalization. The forthcoming analysis will apply both ethnic and religious fractionalization but refrain from including linguistic fractionalization.

As previously stated, the average foreign fighter is reportedly a first- or second-generation immigrant male in his twenties. The labour market situation for these particular groups is thus of interest. The employment gap between natives and first- and second-generation immigrants was calculated with data from UN's database. The gaps concern males aged 15 to 29 as well as males 20 to 64, where the 15 to 29 cohort is of higher interest as it is closer to the profile of the foreign fighters, but the 20 to 64 can also give insight of the overall labour market outcomes of first- and second-generation men. This was included in complementary purposes as the number of

observations were limited. Employment gap between natives and immigrants aged 15 to 29 was not available for Estonia, Latvia, Lithuania, Poland and the Slovak Republic. Employment gap between natives and second-generation immigrants aged 15 to 29 was not available for Poland.

The potential dependent variables measuring foreign fighters are presented in appendix, Table B. It presents the number of observations, the mean, the standard deviation as well as the five number summary including the quantiles, minimum and maximum value. The independent variables are presented in Table C with descriptive statistics categorized in three different subsections. It presents the number of observations, the mean, and standard deviation, minimum and maximum value.

5. Econometric Analysis

In this section the implementation of the data is presented with the means of econometric models and approaches. The first subsection presents the approach of defining the dependent variable. The second subsection presents the econometric strategy and specification used in the forthcoming analysis. The subsequent section describes the key findings which are later elaborated in the two following subsections.

5.1 Pearson's Coefficient Correlation Test

There are different approaches when measuring foreign fighters between countries, either by aggregate number, per Muslim population or per capita[5]. It is not evident which one is preferable. Before proceeding with the econometric analysis, the possible correlation of the potential dependent variables therefore needs to be addressed. A Pearson's correlation coefficient test was conducted to investigate the relationship between the different possible variables on foreign fighters travelling from OECD countries in order to rigorously ascertain how much they differ. The Pearson's coefficient suggests that there is a strong correlation, $| r | > 0.5$, ($r(34) = 0{,}5267$, $p < 0{,}05$) between foreign fighters per capita and the aggregate number of foreign fighters, as illustrated in a scatter plot in Figure 1. These findings, presented in Table 2, indicate that higher levels of foreign fighters per capita tend to be associated with higher numbers of aggregate foreign fighters. As foreign fighters and foreign fighters per capita are highly correlated, this implies that any of the two measurements can be assessed in the forthcoming analysis and provide similar results.

[5] The aggregate number of foreign fighters are presented in Table 1. Foreign fighters per Muslim population is calculated as total number of foreign fighters divided by Muslim population. Foreign fighters per capita is measured as foreign fighters divided by UN's data on population measured in thousands.

Table 2.
Pearson's Coefficient Correlation Test on the Possible Dependent Variables

VARIABLES	Foreign fighters	Foreign fighters per capita	Foreign fighters per Muslim
Foreign fighters	1.0000 34		
Foreign fighters per capita	0.5267* 0.0014 34	1.0000 34	
Foreign fighter per Muslim	-0.1619 0.3604 34	-0.0592 0.7393 34	1.0000 34

Figure 1.

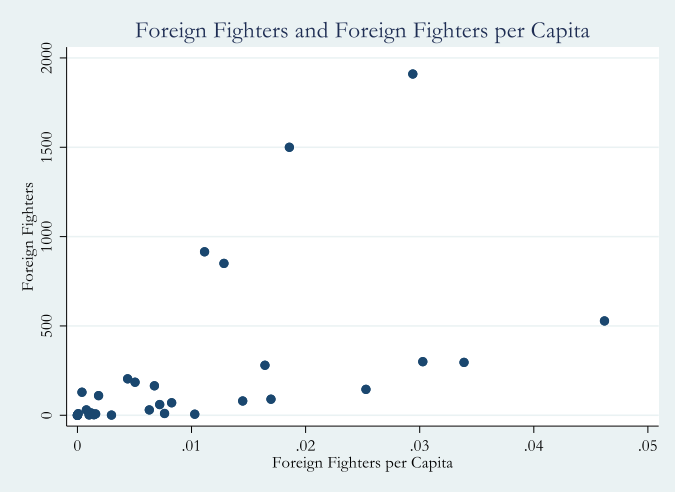

Figure 2.

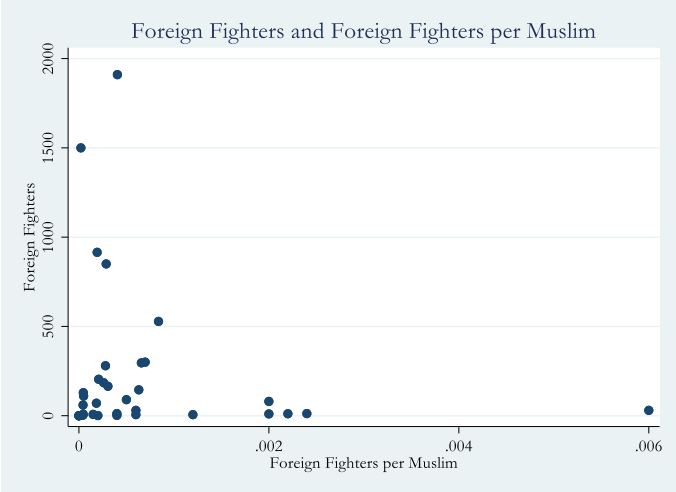

Figure 3.

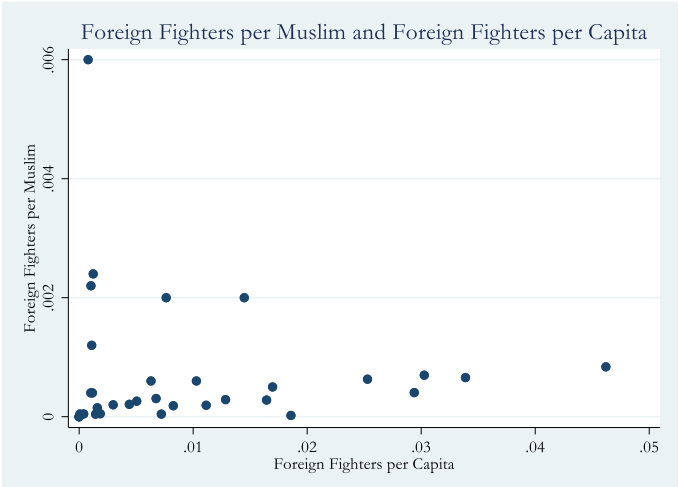

Figure 1, 2 and **3** illustrates the results presented in the Pearson's coefficient correlation matrix. As seen in the figures, foreign fighters per capita and absolute foreign fighter correlates whereas foreign fighters per Muslim is statistically uncorrelated with both absolute number of foreign fighters and foreign fighters per capita.

The Pearson's coefficient correlation test also suggests a negative, statistically insignificant relationship between foreign fighters and foreign fighters per Muslim, as shown in Figure 2. The same applies to foreign fighter per capita and foreign fighter per Muslim, as shown in Figure 3, not entirely surprising as foreign fighters and foreign fighters per capita were strongly correlated. This suggests that foreign fighters per Muslim differs from the two other measurements.

Depending on whether to analyse foreign fighters by an aggregate number, per capita or of Muslim population, this results in distinct results and implications. Looking at the aggregate number of foreign fighters in Table 1, France (1910), followed by Turkey (1500) shows the highest rates of foreign fighters. Germany (915) and the United Kingdom (850) also prove high numbers of foreign fighters. When comparing the number of foreign fighters as the share of Muslim population, however, another picture emerges as the size of Muslim population differs widely across OECD countries. Poland, for instance, shows a disproportionately large share of foreign fighters as a fraction of their, almost insignificantly small Muslim population of less than 0,00 percent of their total population. Turkey, on the other hand, has a Muslim population that constitutes 89 percent of the total population (Pew Research Centre, 2017). When taking this into account, the fact that Turkey is in the top rank of absolute number of foreign fighters does not appear very surprising. Turkish foreign fighters as share of their Muslim population, however, is only 0,0021 percent. Measuring foreign fighters per Muslim population may thus give a skewed idea of the results across countries. As a majority of the OECD member states are non-Muslim countries with a relatively small Muslim population, measuring foreign fighters per Muslim risk inflate the degree and seriousness of this phenomenon, which in turn may lead to an exaggeration of the problem when interpreting it in practice. In addition, there prevails a wide consensus on the fact that most Western fighters do not join the Islamic State primarily on religious grounds, with some of the combatants even being recent converts, which also reduces the credibility and relevance of this measurement (Roy 2016, p. 55). As the ultimate objective in this thesis is to compare patterns across OECD countries, the likelihood, characteristics and discrepancies of the countries providing global ISIS combatants, foreign fighters per capita is regarded a plausible measurement of the dependent variable in this context. By controlling for Muslim population, the results will take that variation into account while refraining from using the measurement of foreign fighters per Muslim.

5.2 Econometric Strategy and Specification

To ascertain the effect of the labour market gaps on foreign fighters, the analysis primarily uses an ordinary least square regression specification, as presented below.

$$Log(1 + Foreign\ fighters\ per\ capita_c) = \beta_0 + \beta_1 Participation\ gap_c + \beta_2 Log(Muslim\ population_c) + \beta_3 Log(Distance\ to\ Syria_c) + \beta_x X_c + \varepsilon_c$$

$Foreign\ fighters\ per\ capita_c$ denotes the dependent variable of interest, and is calculated as the total number of foreign fighters divided by total population in thousands. The dependent variable in the specification is measured as $Log(1 + Foreign\ fighters\ per\ capita_c)$. With the many possible determinants of the phenomenon it is important to control for other variables affecting the outcome or with potential higher statistical significance. The forthcoming augmented regressions are hence gradual expansions of the primarily specification. X_c denotes the various control variables such as GDP, Gini coefficient, Human Development Index included incrementally in the analysis with the aim of in detail detect effects and deviations.

5.3 Bivariate OLS Regression

Before proceeding with the systematic multiple OLS regression analysis, the key findings which are later extended and elaborated in the multiple regressions are presented. The first specification estimates the effect of the participation gap between natives and foreign-born in OECD countries on foreign fighters per capita. Figure 4 below illustrates a preliminary insight of this relationship.

As seen in the scatter plot in Figure 4, Belgium shows the highest number of foreign fighters in relation to its population, whereas Netherlands demonstrates the highest participation gap between natives and immigrants. An interesting observation is Sweden's position in the graph, which lies very close to the data point of France. When comparing the countries in absolute terms, with the figures presented in Table 1, this may appear surprising as France is estimated to 1910 foreign fighters, whereas Sweden only have 300 reported foreign recruits. This suggests that Sweden has a high number of foreign fighters in relation to its relatively small population.

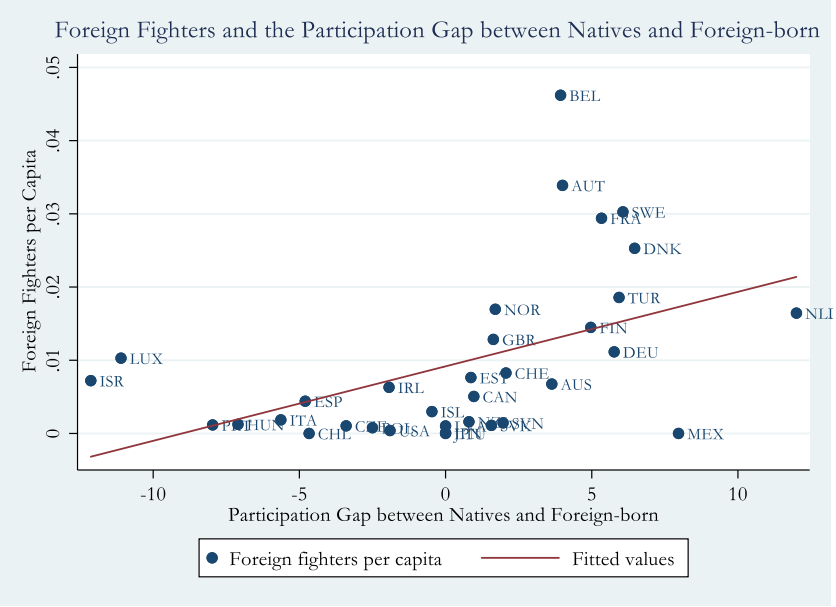

Figure 4 illustrates scatter plots and the estimated linear fit of foreign fighters per capita (population measured in thousands) and the participation gap between natives and foreign born in OECD countries aged 15 to 64 (measured as the average participation gap of 2015, 2016 and 2017).

The shape of the scatter plot in Figure 4 suggests that there might be a non-linear relationship between the participation gap and foreign fighters per capita. This would imply that the participation gap's outcome on foreign fighters takes effect at a certain point, whereby it prior to have a small, almost insignificant impact. Judging from the graph, this threshold seems to be at a participation gap a few points above zero. In order to investigate this possibility, a regression of the participation gap and the square of participation gap was assessed on foreign fighters per capita with results presented in Table 3 below.

Table 3.
Test for Non-linearity

VARIABLES	(1) Foreign Fighters
Participation gap	0.00110***
	(0.000366)
Participation gap^2	6.110005
	(4.650005)
Constant	0.00742***
	(0.00191)
Observations	34
R-squared	0.265

Note: The dependent variable is measured as the log of (1+ foreign fighters per capita).
Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

The results presented in Table 3 suggest that the square of the participation gap has no statistical significance, thus supporting the use of the estimated linear model.

It does indeed seem like the participation gap between natives and immigrants have a positive marginal effect on foreign fighters as shown in both Figure 4 and Table 3. As correlation is not to be taken for causation, however, these implications are not sufficient to state that there is a causal relationship between the two variables. The implication resulting from the bivariate regression is inconclusive as it does not provide any information on how the participation gap affects foreign fighters on country level. The co-variation across variables has to be controlled for in order to determine how the participation gap affects foreign fighters travelling from OECD countries. As a result, this thesis extends the analysis by conducting a number of regressions which will be elaborated further in the next section. Robust standard errors are used throughout the analysis in prevention of heteroscedastic-related biasedness.

5.4 Multiple OLS Regressions

Table 4 reports the results of the OLS multiple regressions for specifications with the variables of highest interest. The dependent variable, Muslim population and distance to Syria are log transformed, whereas the participation gap and unemployment of immigrants are not. The parentheses with standard errors should suggest that the sample mean reflects the sample considerably accurately. The limited sample in this analysis, however, entails that this should not be given too much reliability.

Table 4.
Determinants of Foreign Fighters from OECD countries

VARIABLES	(1) Foreign fighters per capita	(2) Foreign fighters per capita	(3) Foreign fighters per capita
Participation gap	0.000890***		0.000832**
	(0.000295)		(0.000316)
Log(Muslim population)	0.00126**	0.00134***	0.000837*
	(0.000486)	(0.000406)	(0.000423)
Log(Distance to Syria)	-0.00371**	-0.00140	-0.00275*
	(0.00162)	(0.00141)	(0.00160)
Unemployment immigrants		0.000710	0.000634
		(0.000507)	(0.000383)
Constant	0.0248*	-0.000965	0.0163
	(0.0143)	(0.0142)	(0.0150)
Observations	34	34	34
R-squared	0.400	0.342	0.476

Note: The dependent variable is measured as the log of (1+ foreign fighters per capita).
Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

The results of the preliminary regression, as described in 5.2, are presented in specification (1) in Table 4. As stated in section 4.3, the independent variable of interest, participation gap, measures the participation gap between natives and immigrants aged 15 to 64, calculated as an average of the years 2015, 2016 and 2017. The participation gap in model (1) shows statistical significance at the 1% level with a beta coefficient of 0.00089 and standard errors of 0.000295. Under this regression, the implication is that an increase in participation gap results in a, small, but significant increase in foreign fighters as measured per capita, *ceteris paribus*. As the participation gap is measured as the difference between natives and immigrants' participation rate measured in percent and the dependent variable is log transformed, the results in (1) suggest that a one percentage point increase in participation gap, would result in an approximate 0.09% increase in foreign fighters per capita. Muslim population is statistically significant on the 5% level, suggesting that a 10% increase in Muslim population, would increase foreign fighters per capita by 0,0126%. This implies that countries with larger Muslim population correlate with higher numbers of foreign fighters. The beta coefficient of distance to Syria is negative of -0.00371 and significant on the 5% level. This suggests that a 10% increase in distance to Syria, would result in an approximate 0,037% decrease in foreign fighters per capita. The negative sign could be explained by the higher alternative and transportation costs for people travelling from countries further from the Syrian border. The

variable of interest, participation gap, shows higher statistical significance than distance to Syria and Muslim population in this specification. This may suggest that the participation gap and its consequences, serve as a superior determinant in the decision of travelling to Syria than that of distance or Muslim population. Furthermore, in column (2) the beta coefficient of unemployment of immigrants showed no statistical significance whereas Muslim population showed significance on the 1% level. The beta coefficient of the unemployment of immigrants suggests that there is no statistical indication that the relationship is significantly different from zero. Model (3) suggests, just like model (2) that the unemployment of immigrants indicates no statistical significance, but the R^2 implies a higher explanatory power of the variation in the specification, than the two preceding regressions.

In sum, the significant and positive effect of the participation gap in model (1) and (3) on foreign fighters per capita as well as the significance of Muslim population and distance to Syria, harbors the implication that countries with higher participation gaps between natives and immigrants and larger Muslim population, closer to the Syrian border are more prone to act as source countries of Daesh recruits. Participation gap nevertheless seems to be of highest statistical significance. These findings support the hypothesis of people joining Daesh as a result of poor labour market prospects and consequential exclusion as well as lowered opportunity costs.

However, these tentative findings might be inconclusive due to omitted variables or endogenous elements that could affect the outcomes and implications presented above. Data on unemployment of immigrants were unavailable for Japan and Lithuania, thus reducing the number of observations to N=32, which could affect the results partly by distributing more explanatory power to the remaining variables. It may, in addition, provide an inconclusive result as the unknown unemployment rates of these countries could have driven the results in another direction or to another magnitude.

Next, the economic and social determinants of joining ISIS are analysed. The multiple regressions shown in Table 5 below estimate the effects of variables on economic development, inequality and prosperity as well as ethnic and religious fractionalization.

Table 5.
Determinants of Foreign Fighters from OECD countries

VARIABLES	(1) Foreign fighters per capita	(2) Foreign fighters per capita	(3) Foreign fighters per capita	(4) Foreign fighters per capita
Participation gap	0.000983***	0.000992***	0.000695***	0.000828***
	(0.000255)	(0.000257)	(0.000223)	(0.000222)
Log(Muslim population)	0.000722	0.000734	0.00200***	0.00147*
	(0.000426)	(0.000450)	(0.000579)	(0.000836)
Log(Distance to Syria)	-0.00451***	-0.00442**	0.000650	-0.000998
	(0.00156)	(0.00161)	(0.00202)	(0.00234)
Log(GDP)	0.0106***	0.0118**		0.00287
	(0.00338)	(0.00460)		(0.00881)
Ethnic fractionalization			0.00707	0.00680
			(0.0104)	(0.0125)
Religious fractionalization			-0.0176**	-0.0182*
			(0.00719)	(0.00996)
Gini			-0.0782*	-0.0419
			(0.0391)	(0.0537)
HDI		-0.0118		0.0352
		(0.0352)		(0.0750)
Constant	-0.0752**	-0.0778**	0.0108	-0.0427
	(0.0315)	(0.0323)	(0.0159)	(0.0545)
Observations	34	34	34	34
R-squared	0.494	0.495	0.576	0.592

Note: The dependent variable is measured as the log of (1+ foreign fighters per capita).
Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Column (1) in Table 5 implies that participation gap, distance to Syria and GDP are statistically significant on the 1% level. GDP shows a positive beta coefficient of 0.0106 and significance on the 99% confidence interval with robust standard errors of 0.00338. The elasticity suggests that a 10% increase in GDP entails an approximate 0,106% increase in foreign fighters per capita. This indicates that richer countries with higher economic prosperity provide more foreign fighters per capita. This result contradicts, at least on the country level, the widely accepted belief that poverty

explains terrorism, as well as Krueger & Laitin's (2007) findings suggesting that transnational terrorists tend to originate from poorer countries. The implications are however in line with Benmelech and Klor (2016) as well as Verwimp's (2016) findings. These results are particularly evident in the numbers presented in Table 1 and Figure 5, where the Netherlands (280), Australia (165) and Germany (915), are in the top ranking of GDP among OECD countries and also prove high numbers of foreign fighters. The participation gap is continuingly positive and significant on the 1% level, where a one percentage point increase in the participation gap would suggestively imply a 0.0983% increase in foreign fighters per capita.

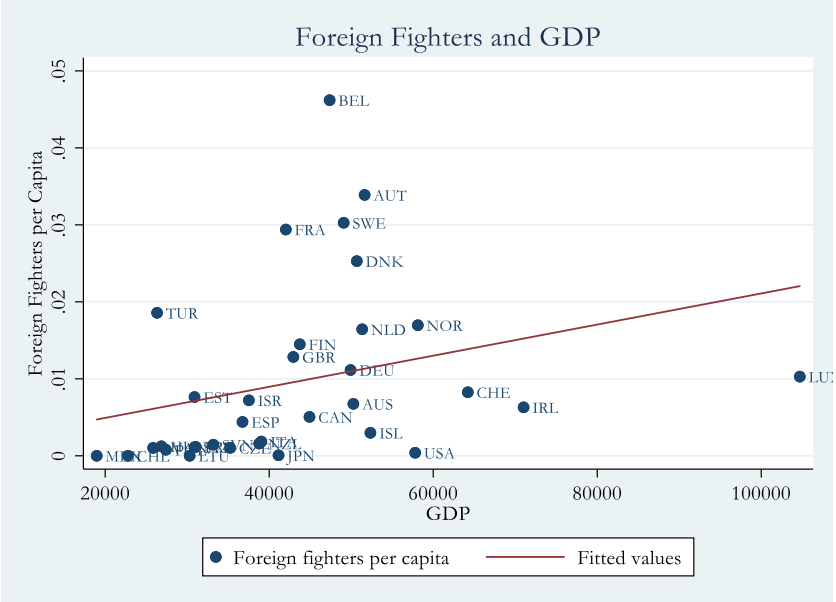

Figure 5 illustrates scatter plots and the estimated linear fit of foreign fighters per capita (population measured in thousands) and GDP.

Human Development Index suggests no statistical significance in column (2). The Gini coefficient in model (3) indicates statistical significance on the 10% level with a negative beta coefficient of -0.0782, which is in line with the assumption that the higher inequality in a country, the more foreign fighters. However, the Gini itself does not say anything about the actual distribution within countries and between groups, but acts as a generic measurement of the inequality. Religious fractionalization show significance on the 5% level with a negative beta coefficient, -0.0176. This result implies that the higher religious fractionalization, that is, the more heterogeneous country, the less foreign fighters. Countries with more religious diversity, are according to this implication not as likely to encounter the foreign fighter phenomenon. This result is in line with the hypothesis of integration as it is reasonable to assume that in secularized or homogenous religious OECD countries, Muslims, have a harder time integrating. Ethnic fractionalization, however, is not

statistical significant, which stands in contrast to Benmelech and Klor's findings (Benmelech & Klor 2016, p. 23). When controlling for all the variables mentioned above in column (4), participation gap, Muslim population and religious fractionalization are still of statistical significance.

In table 6, a different construction of the specification is presented. As stated in section 2.2 as well as in section 3.2, the educational attainment has been shown crucial to future labour market outcomes, and can therefore be expected to have a large impact on the variable of interest. Table 6 presents the effect of participation gap on foreign fighters while controlling for three levels of education gaps between natives and immigrants separately.

Table 6.
Determinants of Foreign Fighters from OECD countries

VARIABLES	(1) Log(Foreign fighters per capita)	(2) Log(Foreign fighters per capita)	(3) Log(Foreign fighters per capita)
Participation gap	0.000354	0.000214	0.000508*
	(0.000254)	(0.000331)	(0.000250)
Log(Muslim population)	0.00213***	0.00259***	0.00160***
	(0.000603)	(0.000611)	(0.000441)
Log(Distance to Syria)	-0.00180	-4.570005	-0.000328
	(0.00193)	(0.00203)	(0.00173)
Education gap low	0.00044***		
	(0.000138)		
Education gap medium		0.000902**	
		(0.000427)	
Education gap high			0.000838**
			(0.000319)
Constant	0.0195	-0.00125	0.00200
	(0.0164)	(0.0180)	(0.0150)
Observations	32	33	33
R-squared	0.531	0.565	0.538

Note: The dependent variable is measured as the log of (1+ foreign fighters per capita).
Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Model (1) presented on the far left side in Table 5 indicates that participation gap shows no statistical significance when controlling for lower levels of education. Primary and lower secondary

school gap showed a positive coefficient of 0.00044 and statistical significance on the 1% level with robust standard errors of 0.000138. Column (2) shows a positive beta coefficient of 0.000902 on upper secondary and post-secondary, non-tertiary education with statistical significance on the 95% confidence interval with robust standard errors of 0.000427. Higher education shows a positive beta coefficient of 0.000838 with statistical significance on the 5% level and robust standard errors of 0.000319, as presented in column (3). The marginal effect of these respective models can be interpreted as that a 1 percentage point increase in the education gaps, would result in an approximately 0.044%, 0.09% respective 0.084% increase in foreign fighters per capita. Participation gap is of significance in column (3), but of less statistical significance than the high level education gap. The fact that the participation gap shows less significance when controlling for the different levels of education is not surprising due to how critically education is for, and related to, future labour market outcomes, as emphasized in section 2.2 and 3.2. If immigrants show lower educational attainment on all levels, that inevitably exacerbates their prospects on the labour market, lowering their participation rates, which in turn can explain the gap and lower its statistical significance. Muslim population, however, shows statistical significance on the 99% confidence level throughout the regressions, hence serving as the strongest determinant in these specifications, suggesting that a country with a small Muslim population faces a lower probability of acting as a fertile ground for producing foreign fighters. Educational attainment was not available for Australia and low level educational attainment was not available for Norway.

In order to test the obtained results on the actual group of interest, without access to personnel records or individual-specific data, an alternative specification was constructed, as presented in Table 7 below, with data on the group closest possible to the observed average foreign fighter profile[6]. This specification analyses foreign fighters per capita and the unemployment gap between male native-born with mixed background, i.e. second-generation immigrants, and native-born with native background aged 15 to 29 and 20 to 64. The 15 to 29 cohort is of highest interest, but the 20 to 64 cohort can provide insights on the overall labour market outcomes of first- and second-generation immigrant men. The missing data on employment gaps and PISA test scores regrettably reduces the sample to 26 respectively 29 OECD member states, but may still provide additional strength and support to the hypothesis and the already obtained results.

[6] See section 2.1

Table 7.
Determinants of Foreign Fighters from OECD countries

VARIABLES	(1) Foreign fighters per capita	(2) Foreign fighters per capita	(3) Foreign fighters per capita	(4) Foreign fighters per capita
Participation gap	0.000799***			0.000859**
	(0.000263)			(0.000415)
Log(Muslim population)	9.790005	0.000567	0.000851	0.00106*
	(0.000556)	(0.000533)	(0.000751)	(0.000543)
Log(Distance to Syria)	-0.00497***	-0.00399*	-0.00320	-0.00401*
	(0.00128)	(0.00204)	(0.00221)	(0.00199)
Employment gap natives – immigrants 15 to 29	0.000782** (0.000283)	0.00102*** (0.000312)	0.000824** (0.000298)	
Employment gap natives – second gen. immigrants 15 to 29	0.000616** (0.000263)	0.000625* (0.000315)	0.000676** (0.000267)	
PISA gap natives – immigrants			-0.000116 (0.000128)	
PISA gap natives – second gen. immigrants			0.000288* (0.000162)	
Employment gap natives – immigrants 20 to 64				0.000499 (0.000611)
Employment gap natives – second gen. immigrants 20 to 64				0.000206 (0.000652)
Constant	0.0473***	0.0341	0.0230	0.0281
	(0.0166)	(0.0231)	(0.0234)	(0.0205)
Observations	29	29	26	34
R-squared	0.581	0.468	0.594	0.443

Note: The dependent variable is measured as the log of (1+ foreign fighters per capita).
Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

The results in column (1) indicate that both participation gap and distance to Syria have statistical significance on the 1% level, which is coherent with the findings presented previously in the analysis. Both the employment gap between natives and immigrants and the employment gap between natives and second-generation immigrants aged 15 to 29 show statistical significance on

the 5% level. The beta coefficients are small, but imply that an increase in employment gap between natives and first- and second-generation immigrants would entail a small increase in foreign fighters per capita. As participation gap partly reflects the employment gap, the significance was tested without controlling for participation gap in model (2). That results in a slightly higher significance in employment gap between natives and immigrants but a smaller, yet significant beta coefficient in employment gap between natives and second-generation immigrants. This result was extended by controlling for gap in PISA reading test scores in column (3). The PISA gap between natives and second-generation immigrants shows significance on the 10% level. Employment gap of the larger cohort 20 to 64, implies no statistical significance in this specification. In sum, this suggests that the employment gap concerning the cohort closest to the one observed among foreign recruits, correlates positively with foreign fighters per capita, reiterating and emphasizing that the poor labour market conditions for first- and second-generation immigrants may be a determinant in the choice of joining ISIS.

5.5 Robustness test

In order to rigorously test the findings presented in the analysis, a robustness test was conducted where outliers were omitted from the sample. This was considered crucial to enhance the credibility of the obtained results and of particular importance due to the several weaknesses of the dataset and limited sample size. The biggest deviant in the sample is Belgium, proving the highest number of foreign fighters in relation to its population as illustrated in Figure 1. The Netherlands also diverges from the estimated linear fit with its large participation gap. In order to test the robustness of the findings in the first specification presented in Table 4, without outliers driving and inflating the results in any direction, the preferred specification was replicated after omitting Belgium and Netherlands from the sample.

Table 8.
Robustness Test of the Determinants of Foreign Fighters from OECD countries

VARIABLES	(1) Foreign fighters per capita	(2) Foreign fighters per capita	(3) Foreign fighters per capita
Participation gap	0.000855**		0.000819**
	(0.000323)		(0.000328)
Log(Muslim population)	0.00111**	0.00124***	0.000824**
	(0.000427)	(0.000380)	(0.000391)
Log(Distance to Syria)	-0.00364**	-0.00168	-0.00296**
	(0.00146)	(0.00122)	(0.00143)
Unemployment immigrants		0.000509	0.000449
		(0.000407)	(0.000276)
Constant	0.0252*	0.00325	0.0191
	(0.0132)	(0.0126)	(0.0133)
Observations	32	32	32
R-squared	0.451	0.342	0.506

Note: The dependent variable is measured as the log of (1+ foreign fighters per capita).
Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

The results presented in Table 8 prove similar results to the ones of the original specification in Table 4, suggesting that the findings of the analysis are consistent and strong. In column (1), the significance of the participation gap has decreased to the 5% level and in column (3), the significance of Muslim population and distance to Syria have increased from the 10% level to the 5% level. This suggests that the findings of the analysis are mainly consistent, when not controlling for education. It could nevertheless be the case that other deviants in the data drive the results in the analysis, which is possible due to the sensitivity of the small sample, but this test excludes the possibility of outlier biasedness in the main specification.

6. Discussion

To briefly summarize the key findings of this analysis, there seems to be a statistical significant and positive correlation between foreign fighters and the labour market participation gap between natives and immigrants in OECD countries, when not controlling for education. Muslim population and distance to Syria are also significant determinants of the foreign fighter phenomenon. In contrast, the empirical analysis has shown the statistical insignificance of unemployment of immigrants, ethnic fractionalization and Human Development Index.

The positive correlation between foreign fighters and participation gap suggests that poor economic prospects and relative deprivation among immigrants may drive participation in Daesh. In addition, higher employment gaps between young first- and second-generation young immigrant men and their native counterparts correlate positively with foreign ISIS recruits, further suggesting that not only first-generation immigrants, but also the disadvantages faced by their offspring are correlated with affiliation with the Islamic State. The positive correlation between foreign fighters and immigrants is coherent with the findings of Verwimp (2016) and Jelil et al. (2018) but stands in contrast to the findings of Hassan (2001), Krueger and Malečková (2003) and Krueger and Laitin (2007). The discrepancy in these results supports the prediction that the phenomenon of foreign fighters travelling from OECD countries differ from terrorists subject to previous studies. As portrayed by the participation gap, which is salient across virtually all OECD countries, as well as the negative significance of religious fractionalization, this could suggestively be due to integration inefficiencies into religiously homogenous or secularized countries.

It must not be the case, however, that the participation gap is what explains foreign fighters, as the relationship does not tell us in what end the positive correlation begins. There is for instance the possibility of reversed causality[7]. The participation gap could have emerged due to shifts in attitudes following previous terror events, which in turn could have affected the labour market situation for immigrants. One possible explanation could be that the recent terrorist attacks in Europe have spurred prejudice and Islamophobia, which in turn may have worsened the labour market opportunities for immigrants. Such changes on the labour market, however, most likely take effect first in the long run. There have for instance been studies on how 9/11 affected Arab and Muslims prospects on the US labour market (e.g. Kaushal et al. 2007). A similar study on the foreign fighter phenomenon's effects on the labour market situation for Muslims and immigrants would be an interesting topic for future research. Another possible explanation and interesting subject for future research could be the rise of far-right parties, consequently exacerbating the integration process for immigrants in the social domain as well as on the labour market, driving them further from the natives and closer to radicalization.

However, when controlling for education gap, the significance of the participation gap fades. This is of little surprise as the consequences of education have crucial and extensive consequences on labour market outcomes. Although it is impossible to derive a causal relationship, one can by

[7] This thesis refrains from drawing any conclusions of causal relationships due to the limited and statistically uncertain data. The reversed causality is thus to be interpreted as a weaker definition of reversed causality.

judging from the obtained results in combination with the presented literature on immigrants educational outcomes assume that the participation gap can be explained by the education gap. If the education gap explains the participation gap and the participation gap, in turn, explains the amount of foreign fighters, the interpretation could be that poor education may be the root of this phenomenon in OECD countries, whereas the participation gap serves as the ultimate driving determinant of joining ISIS. In addition, with reference to Heath & Martin (2013) and Connor and Koenig (2015), immigrants, and in particular Muslims, show worse labour market outcomes even when controlling for migrant-specific factors and education. As this study had no access to individual-specific data this could not be examined, but the results of the studies mentioned implies that if controlling for variables specific for first- and second-generation immigrants, it is likely that the significance of the participation gap would persist to some degree. Regardless if focusing on the participation gap or the education gap, they can both contribute to explaining foreign fighters across OECD countries, either directly or indirectly. Both of these explanations can be traced back to deficient and poor integration of immigrants.

In addition, the foreign fighter phenomenon does seem to be more prominent among wealthier countries, as shown in the positive correlation between foreign fighters and GDP. This stands in contrast with the general view connecting terrorism to poverty, as well as Krueger and Laitin's findings (2007), suggesting that transnational terrorists usually originate from poor countries, and target wealthier countries. The foreign fighter phenomenon and the findings presented in this paper suggest the contrary. As almost all OECD countries show relatively high GDP and economic prosperity, the disparity in results may be in line with Lee's suggestion that terrorists in poor countries tend to be middle class whereas they in richer countries are lower class due to differences in the threshold of opportunity costs (Lee 2011, p. 210). Benmelech and Klor, however, interprets the positive correlation of GDP and foreign fighters as an indication that economic conditions do not act as determinants of joining the Islamic State, which seems accurate on a national level. However, despite finding the same results, this thesis argues the contrary. That high economic development on country-level may contribute further to the relative deprivation faced by immigrants, given their poor labour market outcomes compared to natives, suggesting that they do not get to reap the benefits from these prosperous and affluent societies.

Despite the findings in the analysis not providing a very optimistic outlook of the situation for immigrants in OECD countries, a positive implication of the results can be found. If indeed, people join the Islamic State due to the relative deprivation and poor labour market prospects they face in

their countries, the phenomenon might be preventable. By affirmative actions, positive discrimination and on-the-job training, the barriers for immigrants could be lowered and the participation gap between natives and immigrants could be reduced which could result in an increase of opportunity costs, pushing immigrants over the threshold. That would in turn also provide brighter prospects for their children, the second-generation immigrants. Not only would that pull first- and second-generation immigrants in from the margins of society and above the threshold, but it could also have potential widespread global consequences. If the poor labour market outset for immigrants drives some of them into joining the Islamic State, and if national-level integration improvement could serve as a remedy - that could indirectly reduce the risk of future foreign recruits joining transnational insurgencies. This is highly crucial. Especially if it turns out that the allegedly defeated ISIS is only sleeping, the recruitment of foreign fighters will most likely wake up along with the organization in the future.

Given that this thesis utilizes an aggregate number of foreign fighters and socio-economic indicators on macro level, it only reaches so far as to provide an idea of the respective country-specific characters that are more prone to higher levels of foreign fighters. The limitations of this data, however, cannot be stressed enough. It is important to refrain from drawing any causal conclusions from these results as the nature of this phenomenon in combination with the small sample inevitably and regrettably entails weaknesses. With the limited data on this understudied phenomenon, this is as far one can reach. However, when combining the empirical findings of this study with the evidence of qualitative studies on the matter, it seems coherent. As noted earlier, there are probably as many reasons to join Daesh as there are fighters, but the integration deficiency seems to be a common denominator across the OECD countries. In the future, hopefully additional individual specific-data on the matter have improved which would make a more conclusive analysis possible.

7. Conclusion

This dissertation have by means of a unique dataset on foreign fighters attempted to investigate the underlying mechanisms driving people from OECD countries into joining Daesh. The empirical analysis shows a statistically significant relationship between poor labour market outcomes of immigrants on the OECD labour market and foreign fighters per capita. Despite the small and limited sample, and the many dimensions and possible explanations of this phenomenon, the effect of the participation gap between natives and foreign-born is strikingly salient. This

participation gap can in turn, to a far extent, be explained by the poor educational outcomes of immigrants.

Two main tentative interpretations can be drawn from this analysis. The first is that participation gap between natives and immigrants are positively and significantly correlated with foreign fighters. This suggests that poor labour market opportunities, alienation and lower opportunity costs acts as strong determinants of joining ISIS. Secondly, this gap disappears when controlling for education. This could imply that education can explain the participation gap. Both of these highly connected findings can be derived from deficient integration of immigrants in OECD countries. Whether the poor labour market outcomes or the subsequent feeling of alienation and exclusion is the superior determinant of joining Daesh is yet to be determined. It seems inevitably as that, across OECD states, the countries with worse labour market prospects for immigrants have more foreign fighters per capita. This is not to say that people join the Islamic State because they are unemployed and deprived as compared to natives, but it rather suggests that the relative deprivation seems to be a predisposition of the decision. The results of this analysis have manifested a fragment of an extensive underlying problem, which is immigrants' limited possibilities of fully integrating into OECD societies and labour markets.

This paper have provided significant results and implications of the underlying mechanisms driving people into joining the Islamic State. It has filled an existing gap in the literature on the impact of labour market participation and the phenomenon of foreign fighters and has provided policy implications directed to OECD governments on the extent to which integration reaches, and its fatal consequences, when failed. This thesis should be seen as a contribution to the prevailing discussion on the foreign fighter phenomenon, which is still highly topical and pertinent. The world might be able to militarily defeat an army, an organization or a terrorist network but defeating an entire ideology, is of greater challenge. The findings from this thesis, however, suggest that a start could be in integration policies.

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Appendix

Table A.
Pearson's Coefficient Correlation Test on Ethnic, Linguistic and Religious Fractionalization

VARIABLES	Ethnic fractionalization	Religious fractionalization	Linguistic fractionalization
Ethnic fractionalization	1.0000 34		
Religious fractionalization	0.1845 0.2962 34	1.0000 34	
Linguistic fractionalization	0.7528* 0.0000 34	0.2293 0.1921 34	1.0000 34

Table B.
Descriptive Statistics on Dependent Variables

				Quantiles				
VARIABLE	Observations	Mean	Std. Dev.	Min.	0.25	Mdn.	0.75	Max.
Foreign fighters per capita	34	0.00959	0.0115676	0.00	0.00	0.00	0.01	0.0461969
Foreign fighters per Muslims	34	0.0007013	0.0011455	0.00	0.00	0.00	0.00	0.006
Foreign fighters	34	234.0147	437.2452	0.00	7.50	65	204	1910

Table C.
Descriptive Statistics on Independent Variables

LABOUR MARKET	Observations	Mean	Std. Dev.	Min.	Max.
Participation gap	34	0.4127451	5.368966	-12.13333	12
Unemployment immigrants	34	8.765686	5.524311	0.00	26.43333
Employment gap natives – immigrants 20-64	34	1.408824	4.09126	-7.2	13.6
Employment gap natives – immigrants 15-29	29	-1.655172	6.694859	-22.3	9.7
Employment gap natives – second gen. immigrants 20-64	34	3.402941	4.516467	-1.4	13.8
Employment gap natives – second gen. immigrants 15-29	34	5.239394	8.205788	-9.4	27.2

EDUCATION	Observations	Mean	Std. Dev.	Min.	Max.
Education gap low	32	-0.421875	9.187324	-21.5	18.9
Education gap medium	33	5.824241	5.238919	-4.3	15.2
Education gap high	33	7.7	4.912039	0	16.1
PISA gap natives – immigrants	31	52.67742	36.00591	-2	116
PISA gap native – second. gen immigrants	31	23	27.63452	-37	72

OTHER	Observations	Mean	Std. Dev.	Min.	Max.
Muslim population	34	52.63323	152.7979	0.039206	897.1239
Distance to Syria	34	4765.749	3929.836	567.3	16143.14
GDP	34	43090.96	16389.42	18968.9	104702.3
HDI	34	0.8949933	0.0433578	0.7740346	0.952522
Gini	34	0.3185588	0.052594	0.25	0.454
Ethnic fractionalization	34	0.2620882	0.1965515	0.0119	0.7124
Religious fractionalization	34	0.4192971	0.2312497	0.0049	0.8241