What Explains the Flow of Foreign Fighters to ISIS?*

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Abstract

This paper provides the first systematic analysis of the link between countries' economic, political, and social conditions and the global phenomenon of ISIS foreign fighters. We find that poor economic conditions do not drive participation in ISIS. In contrast, the number of ISIS foreign fighters is positively correlated with a country's GDP per capita and Human Development Index (HDI). Many foreign fighters originate from countries with high levels of economic development, low income inequality, and highly developed political institutions. Other factors that explain the number of ISIS foreign fighters are the size of a country's Muslim population and its ethnic homogeneity. Although we cannot directly determine why people join ISIS, our results suggest that the flow of foreign fighters to ISIS is not driven by economic or political conditions but rather by ideology and the difficulty of assimilation into homogeneous Western countries. These conclusions are consistent with those of the related qualitative literature that relies on the personal profiles of a small and selected sample of ISIS foreign fighters.

1. Introduction

About 30,000 fighters from at least 85 countries have joined the Islamic State of Iraq and Syria (ISIS) as of December 2015. Although the great majority of ISIS recruits come from the Middle East and the Arab world, many foreign fighters also come from Western nations, including most members of the European Union, as well as the United States, Canada, Australia, and New Zealand. Thousands of fighters from Russia and hundreds from Indonesia and Tajikistan have also joined ISIS. The recruitment of foreign fighters to join ISIS is a global phenomenon.[1]

Because of the threat ISIS poses to other nations, it is critical to understand the factors that lead foreigners to join this Islamic jihadist state. Foreign recruits represent a threat to the international community for a number of reasons. After joining ISIS, they engage in combat in Syria and Iraq against ISIS enemies. They also can easily return home from combat largely unnoticed on their government-issued passports. As returnees trained in terrorist tactics and furnished with new connections, these fighters can create terror networks to commit attacks at home (Hegghammer, 2013). For example, Abdelhamid Abaaoud, the alleged leader of the cell that committed the Paris attacks in November 2015, visited Syria, returned radicalized, and recruited an extensive network of accomplices to conduct the attacks (*The Guardian*, November 18, 2015).

Foreign fighters also provide ISIS with the human capital needed to operate in foreign countries. Once in Syria or Iraq, they can recruit operatives and lead them to commit attacks in Western countries without even returning home. As FBI director James Comey stated (House Homeland Security Committee Hearing, September 2014),

> *Foreign fighters traveling to Syria or Iraq could, for example, gain battlefield experience and increased exposure to violent extremist elements ... they may use these skills and exposure to radical ideology to return to their countries of origin, including the United States, to conduct attacks on the Homeland.*

The extreme gravity of this phenomenon leads us to ask: Why do people from all over the world join ISIS? We provide the first systematic analysis of the link between economic, political, and social conditions with the global phenomenon of ISIS foreign fighters. We combine a detailed data set on the number of ISIS foreign fighters emerging from countries around the world with data on

[1]The only country in the Middle East for which there are no records of ISIS foreign fighters is Cyprus.

countries' social, political, and economic indicators. These indicators capture individual countries' political freedom, social fragmentation, economic development, inequality, and unemployment.

We find that poor economic conditions do not drive participation in ISIS. In contrast, the number of ISIS foreign fighters is positively correlated with a country's GDP per capita and its Human Development Index (HDI). In fact, many foreign fighters originate from countries with high levels of economic development, low income inequality, and highly developed political institutions. Other factors that explain the number of ISIS foreign fighters are the size of a country's Muslim population and the degree of its population homogeneity. Interestingly, a country's political characteristics are not correlated with the number of ISIS fighters from that country. The results are robust for different empirical specifications, econometric models, and samples of countries. These conclusions are consistent with those obtained by qualitative analyses of a small and selected sample of ISIS foreign fighters. Overall, the evidence found in our quantitative analysis and that obtained in related qualitative studies leads us to conclude that it is more likely for first or second generation Muslim immigrants to fail to integrate and to assimilate the more homogenous their Western country of residence is. This drives some of these individuals to radicalize, and to move to Syria and Iraq to become foreign fighters.

The notion that social, economic, and political conditions may correlate with terrorism is not new. The widespread view among policy makers after the 9/11 attacks is that poverty breeds terrorism. This view is based largely on research into the economics of conflict, which suggests that political unrest is correlated with poor economic conditions. For example, Alesina et al. (1996) argue that poor economic conditions increase the likelihood of political coups, and Collier and Hoeffer (2004) and Miguel, Satyanath, and Sergenti (2004) show that poor economic conditions are correlated with civil wars.

In contrast, a growing body of empirical literature either confirms a negative correlation between terrorism and economic prosperity [Abadie (2006); Benmelech, Berrebi, and Klor (2012)] or finds no correlation between the two [Krueger and Maleckova (2003); Drakos and Gofas (2006); Piazza (2006); Krueger and Laitin (2008)]. To the best of our knowledge, our study is the first to find a robust positive correlation between GDP per capita, HDI, and volunteering into an insurgent army. It even contrasts with a similar analysis by Krueger (2006) that focuses on foreign fighters captured in Iraq in 2005. As in our study, Krueger (2006) finds that countries with a large Muslim population are more likely to have more of their citizens join the Iraqi insurgency. Contrary to

our findings, however, Krueger (2006) reports that low levels of civil liberties or political rights are associated with a larger number of foreign fighters captured in Iraq, and he finds no correlation between the number of fighters and GDP per capita.

Our results indicate that ISIS foreign recruits present a new profile of terrorists – a more global one – in which terrorists come largely from prosperous, ethnically and linguistically homogenous countries. We believe that this novel finding is explained by both the willingness of individuals to volunteer into ISIS (the supply of foreign fighters) and by ISIS recruitment strategy (the demand for foreign fighters).

Our results are consistent with the notion that the more homogenous the host country is, the more difficulties Muslim immigrants experience in assimilating into the country. Native residents of homogenous countries may discriminate against Muslim immigrants [Adida et al. (2016), Hainmueller and Hopkins (2014)]. Such discrimination and hatred may strengthen the religious identity of Muslim immigrants [Abdo (2006) and Gould and Klor (2016)], and eventually induce some of them to radicalization (Mitt, 2016), resulting in an increase in the supply of foreign volunteers into ISIS. Thus, our findings are consistent with prior studies of terrorism that emphasize the role religious and political ideologies as major drivers of terror organizations' recruits.

On the demand side, ISIS specifically recruits individuals from prosperous Western countries by preying on impressionable youth through its sophisticated propaganda machine and use of social media (Weiss and Hassan, 2014). This serves two purposes. First, it increases the number of ISIS's combatants in Syria and Iraq. Second, and more importantly, it helps ISIS further its goal of creating animosity between the population of Western countries and their Muslim immigrants, which brings an increase in the supply of foreign volunteers. Foreign fighters who return from combat to their western country of origin are particularly effective in creating terror networks and terrorist secret sleeper cells (Hegghammer, 2013). These patterns are consistent with theories in which extremist groups commit terror attacks with the goal of provoking a backlash to bring about the radicalization of moderate supporters that reside in the same country as the perpetrators [see, e.g., Rosendorff and Sandler (2004 and 2010), Siqueira and Sandler (2006), Bueno de Mesquita and Dickson (2007), and Baliga and Sjöström (2012)].[2]

[2]The related literature mentions also a number of other objectives behind a terror campaign. See, for example, the analyses of Lapan and Sandler (1993), Kydd and Walter (2002, 2006), Berman and Laitin (2005, 2008), Bloom (2005), Bueno de Mesquita (2005, 2013), Berrebi and Klor (2006, 2008), Rohner and

The rest of the paper is organized as follows. Section 2 describes the data used in the paper and presents the summary statistics. Section 3 presents the empirical analysis of the determinants of ISIS foreign fighters. Section 4 relates and compares the systematic cross-country evidence of our study to qualitative studies based on individual level data obtained through surveys of a small and selected sample of ISIS foreign fighters. Section 5 concludes.

2. Data and Summary Statistics

The main data set used here comes from two reports issued by the Soufan Group, which provides strategic security intelligence to governments and multinational organizations. The first report, *Foreign Fighters in Syria*, by Richard Barrett, was published in June 2014 (Barrett, 2014). This report calculates the number of ISIS foreign fighters from each country using official estimates of the number of citizens and residents of each country who have traveled to fight in Syria. According to Barrett (2014, p. 11), the figures are based generally on information gathered from social media, community sources, or investigations. Because ISIS prefers to conceal the identity of its members, it is likely that the reported numbers underestimate the actual number of recruits. As Barrett (2014, p. 12) writes:

> *It is only when someone dies that his family learns that he went to Syria, either through a telephone call from a friend designated by the dead fighter for that purpose, or through a death notice published on a group's website, Facebook page or Twitter feed.*

Barrett (2014) provides estimates of the number of citizens or residents who have joined ISIS and have traveled to fight in Syria for 25 countries. He also lists 57 countries from which citizens or residents are reported to have joined ISIS and traveled to fight in Syria but for which no official count exists.

A report by the Soufan Group updates the numbers in Barrett (2014). This report, titled *Foreign Fighters: An Updated Assessment of the Flow of Foreign Fighters into Syria and Iraq* (Soufan Group, 2015), was released in December 2015. In addition to providing the number of citizens or residents who have joined ISIS and have traveled to fight in Syria and Iraq for 65

Frey (2007), Abadie and Gardeazabal (2008), Gould and Klor (2010), Benmelech et al. (2012) and Jaeger et al. (2015).

countries, the report lists 20 countries from which citizens or residents are reported to have joined ISIS and traveled to fight in Syria but for which no official or unofficial count exists.

As is often the case in empirical studies of terrorism, the data used in our analysis may be potentially incomplete and possibly imprecise. That said, we believe that the Soufan Group's (2015) report contains the best available estimates on the universe of foreign fighters joining ISIS from all over the world. As mentioned in The Soufan Group's report (2015, page 5), each country's number of ISIS foreign fighters "have been compiled from official government estimates wherever possible, but also derive from United Nations reports, studies by research bodies, academic sources, and from other sources quoting government officials." Inevitably, whatever their source, the available numbers for each country are subject to an inherent level of uncertainty. Yet, this is the most comprehensive and accurate data set on ISIS foreign fighters. For example, while the Soufan Group's data uses estimates from Neumann (2015), it updates Neumann's estimates from January 2015 to December 2015 for several countries, and extends those estimates to a larger sample of countries.[3]

2.1. Ranking of ISIS Foreign Fighters by Country

Table 1 ranks countries based on the number of its citizens or residents who have become ISIS fighters. The information is based on data from Soufan Group (2015). For each country, the official count of ISIS foreign fighters is listed along with unofficial estimates when available. As the table demonstrates, Tunisia has the highest number of ISIS foreign fighters (6,000), followed by Saudi Arabia (2,500), Russia (2,400), Turkey (2,100), and Jordan (2,000). Among countries in Western Europe, France has the highest number of ISIS foreign fighters (1,700), followed by Germany (760), the United Kingdom (760), and Belgium (470). Cambodia, Moldova, Romania, and South Africa have only one ISIS foreign fighter each.

Table 2 provides information on the 15 countries for which there are only unofficial counts (Soufan Group, 2015). According to unofficial data, there are 600 ISIS foreign fighters from Libya, followed by 500 from Kyrgyzstan, and 360 from Turkmenistan. Kuwait and Somalia have 70 ISIS fighters each, followed by Serbia with 60, and Afghanistan, Georgia, and Trinidad and Tobago with 50 each.[4] Table 3 lists the 20 countries for which there are indications that citizens or residents

[3]The Soufan Group dataset is also more comprehensive than Hegghammer (2013), who only covers several Western countries.

[4]In cases in which either the official or the unofficial count is reported as a range in the report by The

have left to join ISIS and fight in Syria or Iraq but no official or unofficial count exists.

Next, we calculate the number of ISIS foreign fighters per million by dividing the number of ISIS fighters from each country by the country's population (in millions), using data from the World Bank. We use the official count of foreign fighters for countries when this figure is available (Table 1). Otherwise, we use the unofficial count presented in Table 2. Table 4 shows the population-based ranking of ISIS fighters. Tunisia ranks first in the number of ISIS foreign fighters to overall population, with 545.5 ISIS fighters per million individuals, followed by the Maldives (500 per million), Jordan (303 per million), and Lebanon (200 per million). Among Western European countries, Belgium ranks first (42 per million), followed by Austria (35.3 per million), Sweden (30.9 per million), and France (25.7 per million).

Table 5 shows the number of ISIS foreign fighters relative to the Muslim population in each country (in millions).[5] As the table illustrates, Finland has the largest number of ISIS foreign fighters relative to the size of its Muslim population, followed by Ireland, Belgium, Sweden, and Austria. This table already suggests that inequality and poverty are unlikely to be root causes of recruits joining ISIS. After all, Finland's GDP per capita in 2010 was equal to $46,205, and it has a Gini coefficient of 27.1, which makes it not only one of the wealthiest countries in the world but also the 11th most egalitarian. Likewise Norway, which ranks fourth worldwide in terms of equality and in the top fifth percentile in GDP per capita, is in the top ten countries with the most ISIS fighters relative to its Muslim population. Belgium and Sweden, which rank third and fourth in the number of ISIS fighters in Table 5, are respectively the 12th and 15th most egalitarian countries in the world.

2.2. Summary Statistics

Table 6 presents descriptive statistics for the number of foreign fighters and the social, economic, and political indicators used in the empirical analysis. It reports mean, 25th, and 75th percentiles along with the median, the standard deviation, the minimum and maximum, and the number of observations for each variable.

Soufan Group (2015) we use the mid-range point as the count number.

[5]The data on Muslim populations are as of 2010 and were obtained from the Pew Research Center, a nonpartisan American think tank that provides information on social issues, public opinion, and demographic trends.

The mean number of ISIS foreign fighters is 164.3, with a standard deviation of 594.8. In calculating the number of ISIS fighters, we omit the countries reported in Table 3, given that information on their number of foreign fighters is unavailable. Next, we define a dummy variable that takes the value of 1 for countries with at least one ISIS fighter (including countries listed in Table 3), and zero otherwise. As Table 6 shows, 43.5% of countries have a positive number of ISIS fighters who have traveled to fight in Syria and Iraq.[6] The mean population of countries in the sample is 36.7 million individuals, with an average Muslim population share of 24.2% and a median of 2.7%.

We use the World Bank's GDP per capita (in current US prices, 2010) as our first measure of economic development. The GDP per capita in 2010 ranges from $214 to $145,221 with a mean (median) of $14,404 ($5,056). We also use the United Nations Human Development Index (HDI) from 2010 as an alternative measure of economic development. The HDI measures the well-being of the residents of a country based on three different dimensions: education, health, and income. This measure is constructed using country data on life expectancy at birth, school enrollment ratio, adult literacy, and GDP per capita. The index has a potential range of zero to 1, though the actual minimum is 0.326 (Niger) and the maximum is 0.94 (Norway). As a measure of income inequality, we focus on the Gini Index for 2010, which is available from the World Bank database for 151 countries. The Gini Index ranges from a minimum of 16.6 (Azerbaijan) to a maximum of 63.4 (South Africa), with a mean of 39.36. Our final economic measure is unemployment. The unemployment rate across the 164 countries for which data are available in 2010 is on average 8.61%, with a 25th percentile of 4.65% and a 75th percentile of 10.50%.

As our measure of political freedom, we use Freedom House's Political Rights for the year 2010. The Political Rights Index ranges from 1 to 7, with high values representing the absence of political rights. Table 6 shows that at least 25% of the countries in our sample are full democracies with a political rights index equal to 1.

We also include in our analysis indices for ethnic, linguistic, and religious fractionalization. These indices were built by Alesina et al. (2003) and have been updated every year since by the Quality of Government Institute at the University of Gothenburg. The indices calculate the probability that two randomly selected individuals from a given country will not share the same ethnicity,

[6]Given that the analysis in this paper focuses on foreign fighters we exclude Iraq and Syria from the sample.

language, and religion. As with all previous measures, the indices show a great deal of variation among the countries in our sample. Korea, Japan, and Portugal are examples of countries with very low ethnic and linguistic fractionalization, whereas African countries (for example, Cameroon, Kenya, and Liberia) show high levels of ethnic and linguistic fractionalization. Muslim countries tend to have low levels of religious fractionalization (for example, Algeria, Morocco, and Turkey are all below 0.01), whereas Australia, the United States, and South Africa are the three countries with the highest levels of religious fractionalization (their levels are 0.82, 0.82, and 0.86, respectively).

Last, we collect information on the distance in kilometers between each of the countries and Syria. The mean distance is 5,960.9 kilometers and ranges from a minimum of 84 kilometers to a maximum of 16,651 kilometers.

3. Empirical Analysis

3.1. The Likelihood of Joining ISIS

Before we move into the systematic analysis of the determinants of ISIS foreign fighters, we provide a preview of the main correlations of interest in Figures 1 through 5. Figures 1 and 2 present scatter plots (as well as the estimated linear fit) of the number of ISIS foreign fighters per each country's Muslim population and measures of economic prosperity such as GDP per capita (Figure 1) and HDI (Figure 2). The size of the circles in the plots reflects the country's Muslim population size.[7]

As Figures 1 and 2 demonstrate, the number of ISIS foreign fighters per Muslim residents is positively correlated with GDP and HDI. As already established in Table 5, the figures also show that a number of relatively wealthy Western European countries have a substantial number of ISIS foreign fighters relative to the size of their Muslim population. On the contrary, countries with large Muslim populations such as Pakistan, India and Indonesia have very few ISIS fighters relative to the size of their Muslim population. Interestingly, this relation also holds in absolute terms. The total number of ISIS foreign fighters from India, Indonesia and Pakistan (with a combined population of over 560 million Muslims) equals 793, which is lower than the total number of ISIS foreign fighters from Austria, Finland, Denmark, Ireland, Norway and Sweden who jointly have less than 1.4 million Muslim residents and are the countries of origin for over 900 ISIS foreign fighters.

[7]We include only countries with a positive number of ISIS foreign fighters in the plots.

Figures 3 and 4 display similar scatter plots showing that the number of ISIS foreign fighters per Muslim residents is negatively correlated with a measure of economic inequality and uncorrelated with the unemployment rate in these countries. These findings contrast the recent assertions of Thomas Piketty, the prominent scholar of income inequality, who in an op-ed published in *Le Monde* in the aftermath of the recent Paris terror attacks, claims that "only an equitable model for social development will overcome hatred." The large number of foreign fighters coming from highly equitable and wealthy countries such as Finland, Belgium, and Sweden (see Table 5) and the correlations shown in Figures 1 and 2 run contrary to those claims.

Figure 5 focuses on the Political Rights Index and the available indices of fractionalization. The conclusions of Figure 5 are similar to those of Figures 1-4. The figure shows that most ISIS foreign fighters come from established democracies with very high political rights. It is also evident that societies with lower levels of ethnic and linguistic fractionalization contribute more foreign fighters to ISIS relative to the size of their Muslim population.

We turn next to the regression analysis, in which we use different empirical models to estimate the determinants of the flows of ISIS foreign fighters to Iraq and Syria. Table 7 reports results from a probit regression estimating the probability that at least one foreign fighter from a given country joins ISIS. We define a dummy variable that takes the value of 1 for all countries in Tables 1, 2, and 3, and zero otherwise. We use the dummy variable as our dependent variable in the regression analysis reported in Table 7.

In Column (1) of Table 7 we focus exclusively on the economic determinants of joining ISIS. We add to our model political and social variables in Column (2), and we include continent fixed effects in Column (3). As an overall measure of the country's level of development we use the log of GDP per capita in the year 2010 in the first three columns of the table. In Column (4) we use an alternative measure of development instead of GDP per capita – the Human Development Index – a composite statistic of life expectancy, education, and income per capita indicators, which are used to rank countries into four tiers of human development. In Column (5) we focus on the Gini Index as a measure of income inequality.

As Table 7 demonstrates, a country's population size and the size of its Muslim population are significant determinants of the number of ISIS foreign fighters originating from the country. According to the estimated coefficients, a 10% increase in the size of the Muslim population (relative to its mean) increases the probability that country has a positive number of ISIS foreign fighters

by 1.2 percentage points.

As the first three columns of the table show, GDP per capita and the likelihood that at least one fighter from a given country joins ISIS are highly positively correlated. The coefficient is also of a substantial magnitude: A 10% increase in GDP per capita is associated with an increase of 1.5 percentage points in the likelihood that citizens and residents of the country end up joining ISIS. Similar to the positive association between GDP per capita and the likelihood of joining ISIS, we find in Column (4) that an alternative measure of development – the Human Development Index – is also positively correlated with the likelihood of joining ISIS.

We turn next to analyze the impact of income inequality on the probability that an individual from the country joins ISIS. Interestingly, Column (5) of Table 7 demonstrates that the marginal effect of the Gini Index of income inequality is negative (though not precisely estimated). In contrast to the assertions made by Piketty (2015), we do not find that an increase in income inequality is associated with an increase in the likelihood of joining ISIS. Moreover, we find a positive correlation between unemployment and ISIS foreign fighters – although, as we show in the robustness tests below, this correlation is driven entirely by Muslim countries.

Moving to the political variables, we conjecture that the inability of individuals to participate freely in the political process and exercise freedom of expression and belief may lead to radicalization and increase the likelihood of joining ISIS. Yet, as Columns (2) through (5) of Table 7 show, we find that a country's political characteristics are not correlated with the propensity to join ISIS.

Columns (6) through (8) of Table 7 focus exclusively on countries whose Muslim population is less than one third of their total population. The results of these analyses using the subsample of non-Muslim countries are almost identical to those obtained using the full set of countries. The only difference is that unemployment is not a significant determinant of the likelihood of joining ISIS in non-Muslim countries. That is, we observe a positive correlation between indicators of economic prosperity and the likelihood of joining ISIS, whereas income inequality, unemployment, and social and political conditions are not determinants of joining ISIS in non-Muslim countries.

3.2. The Determinants of the Number of ISIS Foreign Fighters

In Table 8 we conduct similar analysis to Table 7 but using the log of the number of ISIS fighters from each country as the dependent variable. This table focuses on the sample of countries for which the number of ISIS foreign fighters is known either officially or non-officially (Tables 1 and

2), as well as all countries for which there are no ISIS foreign fighters – that is, all the other countries in the world excluding those countries in Table 3, resulting in 143 countries.[8] We set the number of ISIS foreign fighters at zero for all countries that are not listed in Tables 1, 2, and 3, and the dependent variable is defined as the log of (1+Number of ISIS fighters).

The results in Table 8 are generally similar to those documented in Table 7. As Table 8 shows, the main determinants of the number of ISIS foreign fighters are the size of the country's Muslim population, its economic prosperity – measured by either GDP per capita or HDI – and its ethnic fractionalization.[9]

We estimate regressions for all countries (Columns (1) - (5)) as well as for only non-Muslim countries – countries whose Muslim population is less than one third of their total population – in Columns (6)-(8). As the table demonstrates, whereas general measures of economic development such as GDP per capita and HDI are positively correlated with the number of ISIS foreign fighters, unemployment is positively associated with the number of ISIS foreign fighters only in Muslim countries. Moreover, our measure of income inequality (Gini Index) is not correlated with the number of ISIS foreign fighters in either sample.

As Column (6) of Table 8 demonstrates, among non-Muslim countries, the elasticities of ISIS foreign fighters to the Muslim population and GDP per capita are 0.384 and 0.507, respectively. That is, an increase of 10% in the size of the Muslim population is associated with an increase of 3.8% in the number of ISIS foreign fighters, and an increase of 10% in GDP per capita is associated with an increase of 5.1% in the number of ISIS foreign fighters. This column also shows that ethnic fractionalization is highly negatively correlated with the number of ISIS foreign fighters – implying that these fighters tend to come from more ethnically homogenous societies.

Whereas in Table 7 we studied the "extensive margin" of ISIS foreign fighters, Table 9 focuses on the "intensive margin." That is, conditional on a country having at least one ISIS foreign fighter, how do different variables affect the number of ISIS foreign fighters from a particular country? For this purpose, Table 9 further restricts the sample by looking only at countries with both an official

[8]Countries in Table 3 are countries with ISIS foreign fighters but for which official or non-official counts are not available.

[9]The three available measures of fractionalization are highly correlated. Hence, from Table 8 onwards we include only ethnic fractionalization in the empirical models to avoid concerns related to multicollinearity. We obtain the same results if we include either of the other two available measures of fractionalization.

or a non-official count of ISIS foreign fighters and, according to these data, with at least one foreign fighter. We use the official count whenever it is available (the countries listed in Table 1) and the non-official count when an official count does not exist (the list of countries in Table 2), and we define the dependent variable as the log of the number of ISIS fighters.

Count data, official or non-official, exists for 65 countries. The final sample that is used in the regression in the first column includes 61 countries with non-zero count data because data on the explanatory variables do not exist for every country. Of course, this limits the available variation in the data, especially when we also control for continent fixed effects. As before, we include all countries with available information in Columns (1)-(5) and non-Muslim countries in Columns (6)-(8).

As Table 9 illustrates, the elasticity of the number of ISIS fighters to the size of the country's Muslim population is significant at the 1% level and is between 0.718 and 1.110. That is, a 10% increase in the size of the Muslim population is associated with between seven and 10% increase in the number of ISIS foreign fighters. Although the smaller sample size does not allow us to estimate the coefficients on the economic and social variables with sufficient precision, their sign and magnitudes are in line with those estimated in Table 8. The estimates in Table 9 confirm the conclusion from the previous tables that dire economic conditions are not root causes of participation in ISIS operations in Iraq and Syria.

We next analyze the link between the number of ISIS foreign fighters and economic conditions using a count data model because the dependent variable is a nonnegative integer. We report the results in Table 10. One common feature of count data (which also holds in the ISIS foreign fighters data) is that the conditional variance is higher than the conditional mean – that is, the data exhibit overdispersion. Given the overdispersion in the number of ISIS foreign fighters, we use a negative binomial model to estimate the effects of economic, political, and social conditions on the number of foreign fighters in each country.

Consistent with the previous analyses, Table 10 also shows that (i) there exists a positive and highly significant correlation between the number of ISIS foreign fighters and the size of the local Muslim population; (ii) the number of ISIS foreign fighters and economic development (measured by either GDP per capita or HDI) are positively correlated; and (iii) there is a negative correlation between social fractionalization and the number of ISIS foreign fighters. Interestingly, our negative binomial estimates suggest not only that income inequality does not lead to more participation in

ISIS but, in fact, that income inequality exhibits a significant negative correlation with the number of ISIS foreign fighters. That is, controlling for other socioeconomic variables, income inequality is associated with fewer, not more, ISIS foreign fighters.

4. ISIS Foreign Fighters: From Country Level to Individual Level Evidence

The main goal of this paper is to understand what drives the ISIS foreign fighters phenomenon. Given that our analysis focuses on systematic data aggregated at the country level, we are only able to highlight which countries' characteristics are more conducive to higher numbers of ISIS foreign fighters. A thorough study of this phenomenon should also take into account the personal background and characteristics of individuals that choose to become ISIS foreign fighters. Unfortunately, such a comprehensive micro-level data set that contains information on the personal characteristics of ISIS foreign fighters does not exist.

Several studies have shed some light on personal characteristics of ISIS recruits – however, these attempts are based on small and selected number of foreign fighters. For example, Dragon (2015) analyzes the recruitment and mobilization of ISIS foreign fighters from Western nations using a sample of 20 foreign fighters from five Western Countries.[10] Similarly, Marinova and Whitt (2014) rely on interviews of four foreign fighters to provide a glimpse into their ideology, goals, and general characteristics.[11] A similar attempt can be found in the report *The Foreign Fighters Phenomenon in the European Union*, which was prepared in 2016 by the International Centre of Counter-Terrorism (ICCT), The Hague. This report describes some of the available profiles of ISIS foreign fighters that originated exclusively in the European Union, and are mainly from Belgium, France, Germany and the UK.[12]

[10]Dragon (2015) sample is based on information from public sources.

[11]These four interviews come from a larger project conducted by these authors, called *Voices of Syria*, which contains information on a larger, though still specially selected, group of fighters. Note that the number of foreign fighters interviewed for this project is still small, probably below 20 individuals (the exact number is not clear from the available material on the project's website).

[12]There are other studies that also rely on a sample of five to ten ISIS foreign fighters but focus exclusively on a particular country. See Kohlmann and Alkhouri (2014) for profiles of mostly American ISIS foreign fighters; Reinares and Garcia-Calvo (2014) for a study on ISIS foreign fighters from Spain; Weggemans et

Thus, as our literature review reveals, there are few studies that have even attempted to analyze the ISIS foreign fighters phenomenon using individual micro-level data. These studies rely on small samples of individuals and are subjected to concerns about selection and may not be representative of the universe of ISIS foreign fighters. The most consistent patterns that emerge from the micro-level studies are that most ISIS foreign fighters are males in their mid-20s with above median socio-economic background and education levels (Stern and Berger, 2015).[13]

Despite the observed diversity in the personal profiles of foreign fighters, a recurrent theme of these studies is consistent with (and complements) the main findings of our study. A substantial majority of foreign fighters are second or third generation immigrants to the West from predominantly Muslim countries.[14] Dragon (2015) concludes that offsprings of Muslim immigrants to the West face a crisis of identity, are more susceptible to an ideology that dichotomizes East versus West society and ideas, and show increased risk of radicalization (Dragon, 2015, page 35). A similar picture emerges from Marinova and Whitt (2014) and Ranstorp et al. (2015). They argue that foreign fighters come to Syria mostly because they fail to integrate to their Western country of residency and are disillusioned by life in the West. The ICCT report argues that foreign fighters originating in Western European countries "express feelings of exclusion and absence of belonging, as if they didn't have a stake in society" (page 26).

In summary, the available evidence from studies relying on surveys of foreign fighters is consistent with the main finding of our study that is based on cross-country analysis. Accordingly, second and third generation immigrants from Muslim countries have a hard time integrating into homogeneous Western societies due to cultural, religious and social differences. A large number

al. (2014) for a study of Dutch foreign fighters; and Zammit (2014) for a study of Australian foreign fighters that died in Syria and Iraq.

[13]A similar picture emerges from ISIS leaked files obtained by German intelligence in 2016 (Engel et al., 2016) and from the ICCT report published in 2016.

[14]Dragon (2015) estimates that over 60 percent of ISIS foreign fighters coming from Western countries are second generation immigrants from Muslim countries. Ranstorp et al. (2015) estimate an even higher percentage of immigrants and refugees among Sweden's foreign fighters. The same pattern appears in the ICCT report (2016) mentioned above. For example, most of Austrian ISIS foreign fighters are second-generation immigrants of Chechen origin (page 24); most ISIS foreign fighters from The Netherlands are second generation immigrants from Morocco and Somalia (page 36); and most ISIS foreign fighters from the UK are of South-Asian ethnic origin.

of them feel alienated and socially excluded in their Western country of residence (ICCT, 2016, page 53). This leads to a process of radicalization that starts in the West, whereby their feelings of marginalization and discrimination make them susceptible to fundamentalist interpretations of militant Islam. Ultimately, they join ISIS as foreign fighters because of this process of radicalization and in search for belonging and a cause to embrace.

5. Conclusion

ISIS recruitment of foreign fighters is a global phenomenon that provides the organization with the human capital needed to operate within and outside the Middle East. This paper explores how country characteristics are associated with ISIS recruit flows. In particular, we use data on the number of ISIS foreign fighters from around the world and provide a systematic analysis of the link between economic, political, and social conditions and the global phenomenon of ISIS foreign fighters. Although we cannot directly determine why people join ISIS, our results suggest that the flow of foreign fighters to ISIS is not driven by economic or political conditions but rather by ideology and the difficulty of assimilation into homogeneous Western countries. Our results show that, in contrast to conjectures made recently by economists and policy makers, economic conditions are not the root causes of the global phenomenon of ISIS foreign fighters. In fact, many foreign fighters originate from countries with high levels of economic development, low income inequality, and highly developed political institutions. This is, to the best of our knowledge, the first systematic evidence showing a robust positive correlation between ISIS foreign fighters' countries of origin and economic and political conditions.

If poverty and lack of social equality are not to blame, then why are Western European countries disproportionately significant sources of ISIS foreign fighters? The reason lies in other country characteristics: they are ethnically and linguistically homogenous. Although we are unable to determine precisely why people join ISIS, our results and the related qualitative literature suggest that difficulty of assimilation into homogenous Western countries plays an important role. As other research has shown (Mitt, 2016), Muslims' feeling of isolation and ISIS's appeal to impressionable youth through its sophisticated propaganda machine and social media induce some of them to radicalize.

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Figure 1: Correlation between Number of ISIS Foreign Fighters (per 10,000 Muslims in population) and Economic GDP per Capita (dot size reflects each country's number of Muslim residents).

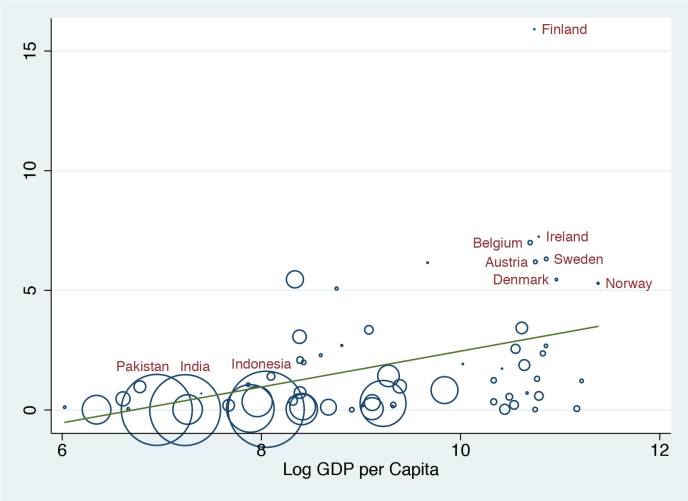

Figure 2: Correlation between Number of ISIS Foreign Fighters (per 10,000 Muslims in population) and Human Development Index (dot size reflects each country's number of Muslim residents).

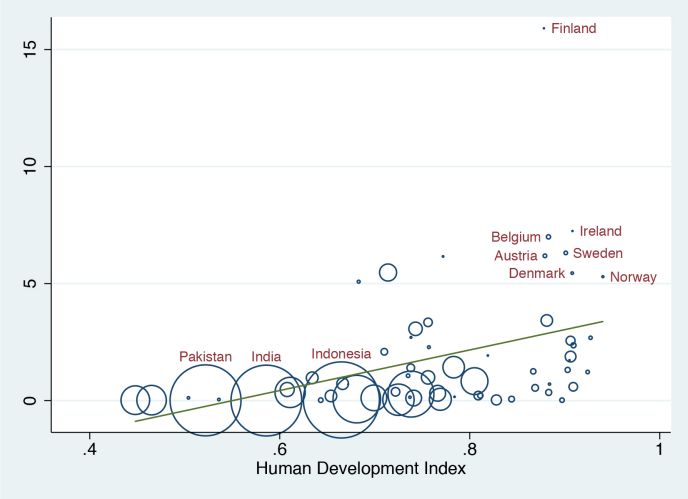

Figure 3: Correlation between Number of ISIS Foreign Fighters (per 10,000 Muslims in population) and Gini Index (dot size reflects each country's number of Muslim residents).

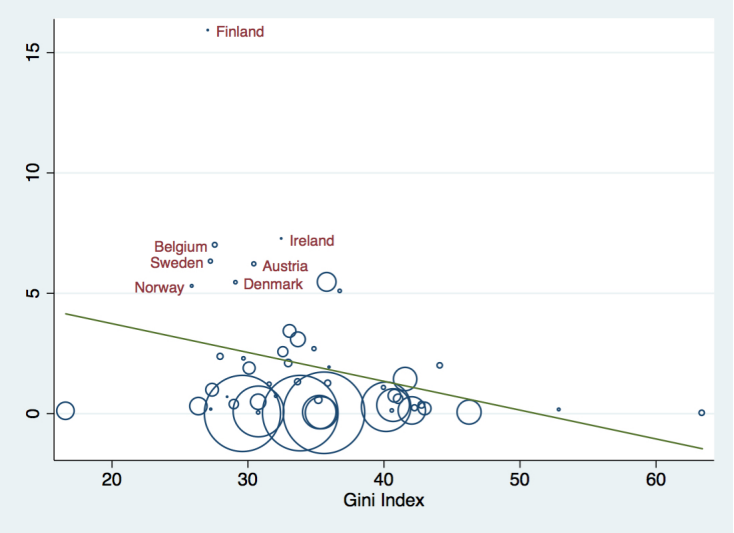

Figure 4: Correlation between Number of ISIS Foreign Fighters (per 10,000 Muslims in population) and Unemployment (dot size reflects each country's number of Muslim residents).

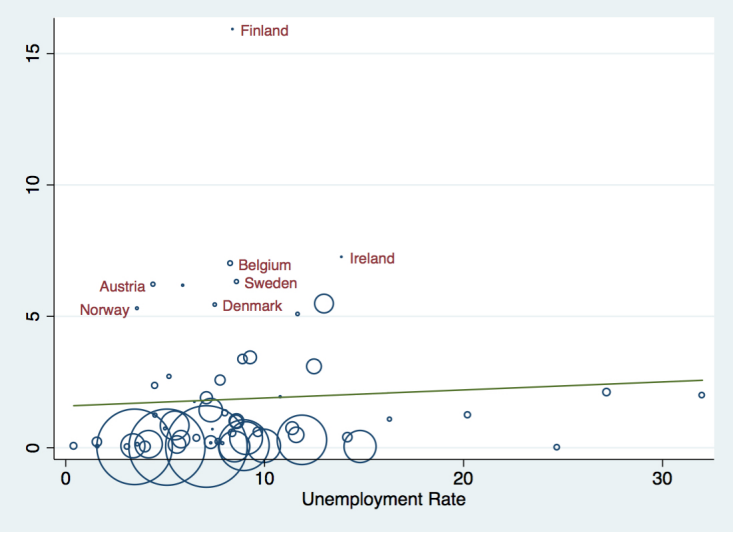

Figure 5: Correlation between Number of ISIS Foreign Fighters (per 10,000 Muslims in Population) and Political Rights and Fractionalization Indices (dot size reflects each country's number of Muslim residents).

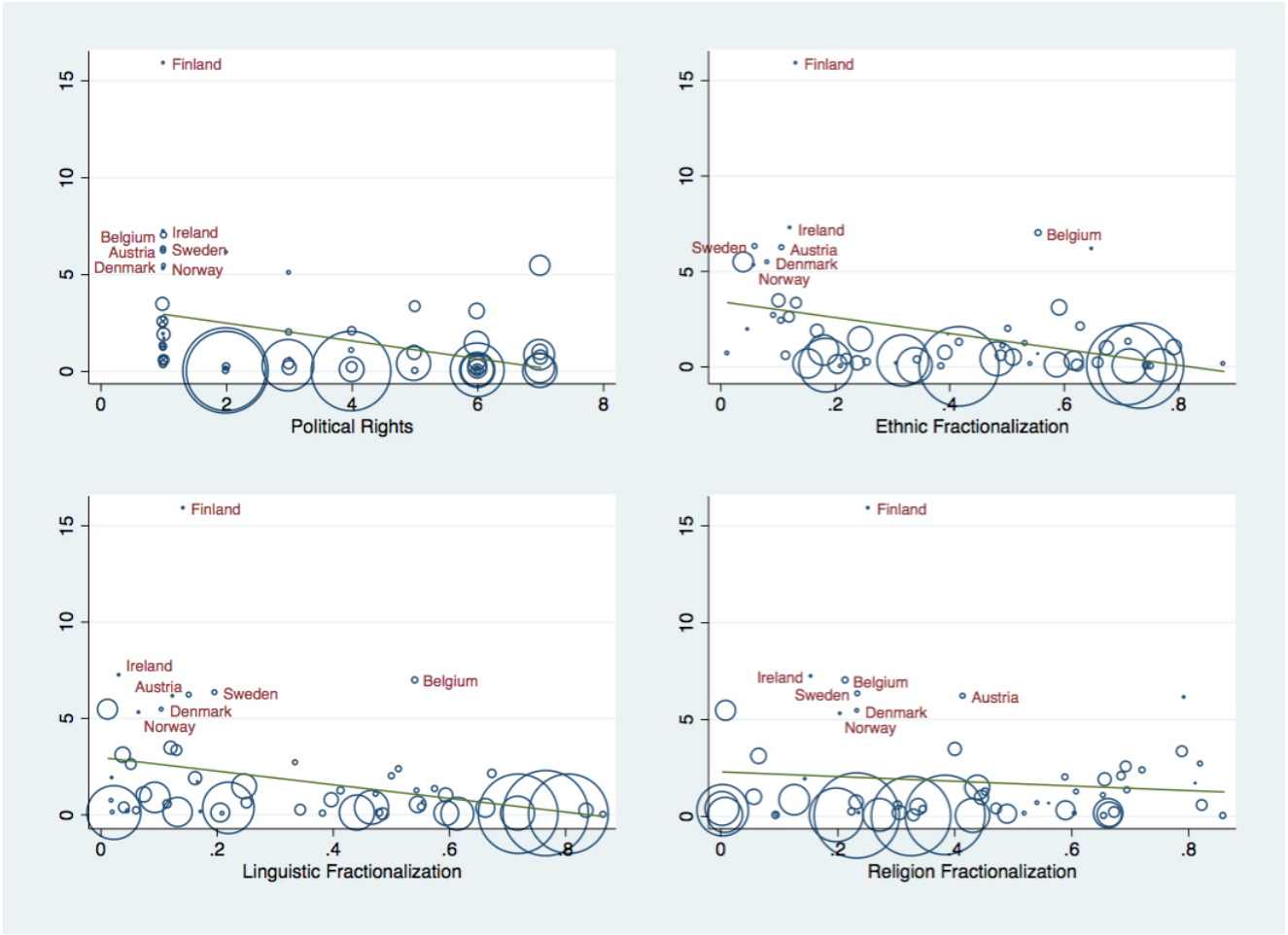

Table 1: Ranking of ISIS Foreign Fighters by Country Based on Official Count

	Count			Count	
Country	Official	Non-Official	Country	Official	Non-Official
1. Tunisia	6,000	7,000	26. Spain	133	250
2. Saudi Arabia	2,500	-	27. Canada	130	-
3. Russia	2,400	-	28. Denmark	125	125
4. Turkey	2,100	-	29. Australia	120	255
5. Jordan	2,000	2,500	30. Azerbaijan	104	216
6. France	1,700	2,500	31. Malaysia	100	-
7. Morocco	1,200	1,500	32. Philippines	100	-
8. Lebanon	900	-	33. Albania	90	150
9. Germany	760	-	34. Italy	87	-
10. United Kingdom	760	-	35. Norway	81	60
11. Indonesia	700	500	36. Finland	70	85
12. Egypt	600	1,000	37. Pakistan	70	330
13. Belgium	470	470	38. Sudan	70	100
14. Tajikistan	386	-	39. Switzerland	57	-
15. Bosnia	330	217	40. Israel	50	-
16. Austria	300	233	41. Ireland	30	30
17. China	300	-	42. India	23	45
18. Kazakhstan	300	-	43. New Zealand	7	6
19. Sweden	300	300	44. Brazil	3	-
20. Kosovo	232	-	45. Madagascar	3	-
21. Netherlands	220	210	46. Singapore	2	-
22. Maldives	200	60	47. Cambodia	1	-
23. Algeria	170	225	48. Moldova	1	-
24. United States	150	250	49. Romania	1	-
25. Macedonia	146	100	50. South Africa	1	-

Note: Based on data from Barrett (2014) and The Soufan Group (2015).

Table 2: Ranking of ISIS Foreign Fighters by Country Without an Official Count

Country	Non-Official Count
1. Libya	600
2. Kyrgyzstan	500
3. Turkmenistan	360
4. Kuwait	70
5. Somalia	70
6. Serbia	60
7. Afghanistan	50
8. Georgia	50
9. Trinidad and Tobago	50
10. Montenegro	30
11. Argentina	23
12. United Arab Emirates	15
13. Portugal	12
14. Qatar	10
15. Japan	9

Note: Based on data from Barrett (2014) and The Soufan Group (2015).

Table 3: Countries with ISIS Foreign Fighters without an Oficial or Non-Official Count

	Country
1.	Armenia
2.	Bahrain
3.	Bangladesh
4.	Bulgaria
5.	Chad
6.	Côte d'Ivoire
7.	Czech Republic
8.	Eritrea
9.	Estonia
10.	Hungary
11.	Iran
12.	Luxembourg
13.	Mauritania
14.	Oman
15.	Palestine
16.	Poland
17.	Senegal
18.	Ukraine
19.	Uzbekistan
20.	Yemen

Note: Based on data from Barrett (2014) and The Soufan Group (2015).

Table 4: Ranking of Countries based on ISIS Foreign Fighters to General Population

Country	Fighters per Million Residents	Country	Fighters per Million Residents
1. Tunisia	545.5	34. Switzerland	7
2. Maldives	500	35. Egypt	6.7
3. Jordan	303	36. Somalia	6.7
4. Lebanon	200	37. Ireland	6.5
5. Kosovo	128.9	38. Israel	6.1
6. Libya	95.2	39. Australia	5.1
7. Bosnia	86.8	40. Qatar	4.5
8. Kyrgyzstan	86.2	41. Algeria	4.4
9. Saudi Arabia	80.9	42. Canada	3.7
10. Macedonia	69.5	43. Malaysia	3.3
11. Turkemenistan	67.9	44. Spain	2.9
12. Montenegro	50	45. Indonesia	2.8
13. Tajikistan	46.5	46. Sudan	1.8
14. Belgium	42	47. United Arab Emirates	1.7
15. Trinidad and Tobago	35.7	48. Afghanistan	1.6
16. Morocco	35.4	49. New Zealand	1.5
17. Austria	35.3	50. Italy	1.4
18. Albania	31	51. Portugal	1.2
19. Sweden	30.9	52. Phlippines	1
20. Turkey	27.7	53. Cambodia	0.7
21. France	25.7	54. Argentina	0.5
22. Denmark	22.3	55. Romania	0.5
23. Kuwait	18.4	56. Pakistan	0.4
24. Kazakhstan	17.3	57. United States	0.4
25. Russia	16.7	58. Singapore	0.3
26. Norway	15.9	59. India	0.2
27. Netherlands	13	60. Moldova	0.2
28. Finland	12.7	61. South Africa	0.2
29. United Kingdom	11.8	62. Brazil	0.1
30. Georgia	11.1	63. China	0.1
31. Azerbajian	11	64. Japan	0.1
32. Germany	9.4	65. Madagascar	0.1
33. Serbia	8.5		

Note: Data on number of ISIS foreign fighters come from Barrett (2014) and The Soufan Group (2015). Population size data come from the World Bank.

Table 5: Ranking of Countries based on ISIS Foreign Fighters to Muslim Population

Country	Fighters per Million Muslims	Country	Fighters per Million Muslims
1. Finland	1,590.9	34. Japan	70.8
2. Ireland	724.6	35. Moldova	69.4
3. Belgium	699.4	36. United States	58.8
4. Sweden	631.2	37. Italy	54.6
5. Austria	619.2	38. Tajikistan	47
6. Trinidad and Tobago	615.8	39. Albania	37.8
7. Tunisia	546.6	40. Morocco	35.4
8. Denmark	544.4	41. Israel	34.5
9. Norway	529.4	42. Kazakhstan	30.8
10. Maldives	508.1	43. Turkey	28.1
11. France	342.4	44. Argentina	21.4
12. Lebanon	335	45. Kuwait	21.3
13. Jordan	306.7	46. Philippines	19.8
14. Montenegro	270.3	47. Romania	16.8
15. Australia	268.8	48. Brazil	14.6
16. United Kingdom	256.2	49. China	12.2
17. Netherlands	236.7	50. Madagascar	11.6
18. Serbia	228.4	51. Azerbajian	11.1
19. Bosnia	208.8	52. Egypt	7.1
20. Macedonia	199.2	53. Somalia	6.8
21. Portugal	192.3	54. Qatar	5.9
22. Germany	187.9	55. Malaysia	5.5
23. New Zealand	172.8	56. Algeria	4.5
24. Russia	142.7	57. Cambodia	4.1
25. Kosovo	140.6	58. Indonesia	3.1
26. Canada	130.8	59. Sudan	2.5
27. Spain	124.6	60. Singapore	2.4
28. Switzerland	122	61. United Arab Emirates	2.2
29. Georgia	105.8	62. Afghanistan	1.6
30. Libya	98.6	63. South Africa	1.2
31. Kyrgyzstan	97.1	64. Pakistan	0.4
32. Saudi Arabia	83.3	65. India	0.1
33. Turkmenistan	72.8		

Note: Data on number of ISIS foreign fighters come from Barrett (2014) and The Soufan Group (2015). Data on the size of countries' Muslim population are for the year 2010 and come from the Pew Research Center.

Table 6: Summary Statistics

Variable	Mean	25th Percentile	Median	75th Percentile	Standard Deviation	Minimum	Maximum	Number of Observations
Number of ISIS Fighters	164.3	0	0	57	594.8	0	6,000	173
Pr(ISIS Fighters > 0)	0.435	0	0	1	0.497	0	1	193
Population Size	36.7	1.8	7.1	23.6	139.8	0.1	1,364.3	193
Percent Muslims	24.2	0	2.7	36.7	36.4	0	99.9	192
GDP per Capita (US$)	14,404	1,419	5,056	15,901	22,633	214	145,221	193
Human Development Index	0.683	0.554	0.721	0.795	0.155	0.326	0.94	189
Gini Index	39.4	33.0	38.1	44.7	8.8	16.6	63.4	151
Unemployment Rate	8.61	4.7	7.6	10.5	5.71	0.4	32	164
Political Rights	3.33	1	3	5	2.12	1	7	184
Ethnic Fractionalization	0.44	0.2	0.43	0.67	0.26	0	0.93	179
Linguistic Fractionalization	0.4	0.13	0.38	0.65	0.28	0.002	0.92	174
Religious Fractionalization	0.44	0.23	0.46	0.65	0.23	0.002	0.86	182
Distance to Syria (in km)	5,960.90	2,737	4,753	9,444	4,081.5	84	16,651	193

Note: All variables are measured in the year 2010 except for Population Size which is measured in 2014. See main body of the manuscript for a detailed description of the data sources.

Table 7: Determinants of the Likelihood of Joining ISIS

	All Countries					Non-Muslim Countries		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Log Population	0.076 **	0.082 **	0.077 *	0.061	0.101 **	0.115 **	0.101 **	0.176 ***
	[0.036]	[0.038]	[0.042]	[0.041]	[0.050]	[0.045]	[0.044]	[0.062]
Log Muslim Population	0.010 ***	0.111 ***	0.119 ***	0.126 ***	0.108 ***	0.053	0.058 *	0.029
	[0.023]	[0.027]	[0.028]	[0.028]	[0.029]	[0.035]	[0.034]	[0.034]
Log GDP per Capita	0.216 ***	0.198 ***	0.147 ***			0.143 **		
	[0.040]	[0.041]	[0.045]			[0.062]		
Human Development Index				1.622 ***			1.640 **	
				[0.533]			[0.786]	
Gini Index					-0.012			-0.014
					[0.010]			[0.014]
Unemployment Rate	0.022 **	0.021 **	0.027 ***	0.025 **	0.035 ***	0.009	0.009	0.015
	[0.009]	[0.009]	[0.010]	[0.010]	[0.012]	[0.014]	[0.014]	[0.017]
Log Distance To Syria	-0.166 *	-0.175 *	-0.105	-0.100	-0.020	-0.031	-0.016	-0.020
	[0.092]	[0.098]	[0.108]	[0.108]	[0.092]	[0.108]	[0.106]	[0.102]
Political Rights		0.038	0.043	0.043	-0.009	-0.014	-0.015	-0.105 ***
		[0.028]	[0.035]	[0.037]	[0.038]	[0.041]	[0.042]	[0.040]
Ethnic Fractionalization		-0.067	0.253	0.246	-0.195	0.362	0.308	-0.024
		[0.345]	[0.438]	[0.421]	[0.510]	[0.498]	[0.479]	[0.522]
Linguistic Fractionalization		-0.549	-0.591	-0.526	-0.407	-0.490	-0.409	-0.418
		[0.351]	[0.448]	[0.421]	[0.527]	[0.476]	[0.449]	[0.536]
Religious Fractionalization		0.064	0.069	0.033	0.098	0.440	0.353	0.413
		[0.242]	[0.256]	[0.262]	[0.289]	[0.357]	[0.351]	[0.381]
Continent Fixed Effects	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Number of observations	163	155	155	155	155	109	109	100

Note: The dependent variable is a dummy variable that takes the value of 1 if there is a positive number of ISIS foreign fighters, and zero otherwise. The table reports the marginal effects from a Probit regression computed at the means of the independent variables. Robust standard errors appear in brackets. * indicates statistically significant at 10% level, ** indicates statistically significant at 5% level; *** indicates statistically significant at 1% level.

Table 8: The Determinants of the Number of ISIS Foreign Fighters

	All Countries					Non-Muslim Countries		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Log Population	0.126	0.129	0.060	0.042	0.059	0.181 *	0.149	0.201 *
	[0.113]	[0.109]	[0.108]	[0.107]	[0.121]	[0.108]	[0.110]	[0.115]
Log Muslim Population	0.417 ***	0.456 ***	0.543 ***	0.540 ***	0.524 ***	0.384 ***	0.404 ***	0.404 ***
	[0.066]	[0.065]	[0.070]	[0.070]	[0.077]	[0.077]	[0.081]	[0.083]
Log GDP per Capita	0.719 ***	0.663 ***	0.475 ***			0.507 ***		
	[0.086]	[0.108]	[0.116]			[0.117]		
Human Development Index				5.811 ***			4.611 ***	
				[1.265]			[1.309]	
Gini Index					-0.031			-0.007
					[0.024]			[0.027]
Unemployment Rate	0.065 **	0.078 ***	0.093 ***	0.090 ***	0.117 ***	0.024	0.031	0.049
	[0.027]	[0.025]	[0.022]	[0.024]	[0.027]	[0.029]	[0.027]	[0.030]
Log Distance To Syria	-0.458 *	-0.287	-0.423 *	-0.397 *	-0.254	0.157	0.175	0.250
	[0.235]	[0.232]	[0.242]	[0.240]	[0.331]	[0.416]	[0.420]	[0.489]
Political Rights		0.163 *	0.178 **	0.188 **	0.040	0.008	0.005	-0.143
		[0.086]	[0.088]	[0.092]	[0.096]	[0.090]	[0.097]	[0.099]
Ethnic Fractionalization		-2.409 ***	-2.154 ***	-2.011 ***	-3.000 ***	-1.444 **	-1.749 **	-2.338 ***
		[0.640]	[0.656]	[0.614]	[0.781]	[0.658]	[0.666]	[0.739]
Continent Fixed Effects	No	No	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.581	0.640	0.684	0.689	0.650	0.651	0.634	0.622
Number of observations	143	141	141	140	123	105	105	95

Note: The dependent variable is the log of (1+ number of ISIS foreign fighters). The table reports the estimated coefficients from OLS regressions. Robust standard errors appear in brackets. * indicates statistically significant at 10% level, ** indicates statistically significant at 5% level; *** indicates statistically significant at 1% level.

Table 9: The Determinants of the Number of ISIS Foreign Fighters: Intensive Margin

	All Countries					Non-Muslim Countries		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Log Population	-0.281	-0.412 **	-0.339 *	-0.313	-0.575 **	-0.344	-0.330	-0.744 *
	[0.176]	[0.190]	[0.199]	[0.196]	[0.245]	[0.279]	[0.284]	[0.400]
Log Muslim Population	0.718 ***	0.811 ***	0.859 ***	0.863 ***	0.914 ***	0.923 ***	0.916 ***	1.110 ***
	[0.099]	[0.118]	[0.136]	[0.133]	[0.159]	[0.239]	[0.232]	[0.281]
Log GDP per Capita	0.525 ***	0.359 *	0.258			0.387		
	[0.123]	[0.208]	[0.212]			[0.398]		
Human Development Index				4.945 **			5.392	
				[2.456]			[4.945]	
Gini Index					0.037			0.028
					[0.040]			[0.081]
Unemployment Rate	0.064	0.066 *	0.043	0.062 *	-0.010	0.046	0.043	0.022
	[0.043]	[0.036]	[0.029]	[0.032]	[0.034]	[0.050]	[0.045]	[0.043]
Log Distance To Syria	-0.228	-0.089	-0.247	-0.201	-0.100	-0.368	-0.284	0.107
	[0.203]	[0.230]	[0.247]	[0.251]	[0.306]	[0.486]	[0.526]	[0.473]
Political Rights		-0.030	0.147	0.190	0.115	0.359	0.346	0.220
		[0.145]	[0.142]	[0.132]	[0.145]	[0.284]	[0.253]	[0.280]
Ethnic Fractionalization		-2.589 ***	-2.635 ***	-2.183 **	-2.783 ***	-2.704	-2.643	-2.846
		[0.907]	[0.943]	[0.932]	[1.071]	[1.875]	[1.889]	[1.844]
Continent Fixed Effects	No	No	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.526	0.608	0.672	0.698	0.660	0.755	0.762	0.748
Number of observations	61	60	60	59	50	35	35	32

Note: The dependent variable is the log of number of ISIS foreign fighters. The analysis includes only countries with a positive number of ISIS foreign fighters. The table reports the estimated coefficients from OLS regressions. Robust standard errors appear in brackets. * indicates statistically significant at 10% level, ** indicates statistically significant at 5% level; *** indicates statistically significant at 1% level.

Table 10: Negative Binomial Estimates of the Determinants of the Number of ISIS Foreign Fighters

	All Countries					Non-Muslim Countries		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Log Population	-0.461 ***	-0.506 **	-0.365	-0.333	0.166	-0.203	-0.219	0.502
	[0.153]	[0.228]	[0.340]	[0.288]	[0.343]	[0.296]	[0.259]	[0.444]
Log Muslim Population	1.261 ***	1.219 ***	1.275 ***	1.240 ***	1.120 ***	1.124 ***	1.094 ***	0.980 ***
	[0.134]	[0.174]	[0.248]	[0.237]	[0.280]	[0.208]	[0.206]	[0.300]
Log GDP per Capita	1.136 ***	1.112 ***	0.886 ***			0.903 ***		
	[0.187]	[0.249]	[0.266]			[0.250]		
Human Development Index				14.440 ***			14.390 ***	
				[2.186]			[4.816]	
Gini Index					-0.115 ***			-0.149 **
					[0.034]			[0.069]
Unemployment Rate	0.087 *	0.082 *	0.106	0.099	0.136 **	0.039	0.013	0.145 **
	[0.050]	[0.042]	[0.068]	[0.061]	[0.060]	[0.088]	[0.075]	[0.067]
Log Distance To Syria	-0.241	-0.120	-0.064	0.035	-0.480 **	0.041	0.341	-0.634
	[0.194]	[0.244]	[0.259]	[0.214]	[0.211]	[0.422]	[0.433]	[0.441]
Political Rights		0.146	0.473 **	0.453 **	0.189	0.221	0.289	-0.033
		[0.164]	[0.189]	[0.195]	[0.200]	[0.219]	[0.264]	[0.227]
Ethnic Fractionalization		-1.731 *	-2.250 *	-1.473	-3.732 ***	0.267	0.537	-1.596
		[1.013]	[1.270]	[1.402]	[1.433]	[2.041]	[2.001]	[1.566]
Continent Fixed Effects	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R-squared	0.1085	0.1124	0.1303	0.1477	0.1248	0.1638	0.1700	0.1585
Number of observations	143	141	141	140	123	105	105	95

Note: The dependent variable is the number of ISIS foreign fighters. The table reports the estimated coefficients from Negative Binomial regressions. Robust standard errors appear in brackets. * indicates statistically significant at 10% level, ** indicates statistically significant at 5% level; *** indicates statistically significant at 1% level.