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A Global Analysis Of Islamist Violence

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Abstract

This paper examines the relationship between percentage of Muslims in the population and two separate measures of Islamist violence for a large cross-section of countries (n = 168). The first measure of Islamist violence is the number of Islamist attacks 2001–2017 (logged); the second is the number of casualties from Islamist violence 2001-2017 (logged). Percentage Muslim was strongly associated with both measures of Islamist violence ($\beta = .49-50$). These associations were not disproportionately driven by co-variation within one or two global regions: positive associations were found within Sub-Saharan Africa ($\beta = .35-36$), South & East Asia ($\beta = .49-50$), Eurasia ($\beta = .28-37$), and the West ($\beta = .35-46$). The raw associations within Latin America & Caribbean ($\beta = .16-19$) were weak, and those within Middle East & North Africa were negative ($\beta = -.17-20$). Yet the results for Middle East & North Africa were attributable to Israel being a major outlier; when Israel was omitted, very weak positive associations emerged ($\beta = .06-.10$). In a multiple regression analysis, both associations were robust to controlling for region fixed-effects, land area (logged), absolute latitude, average elevation, terrain roughness, legal origin, GDP per capita (logged), democracy, and ethnic fractionalisation ($\beta = .29-30$). Consistent with a previous study, both percentage Muslim ($\beta = .24-58$) and indicators of military intervention in the Middle East ($\beta = .21-58$) were associated with Islamist violence across Western countries.

Keywords: Islamist violence, terrorism, percentage Muslim, military intervention, multiple regression

1 Introduction

Carl (2016) analyzed the relationship between percentage of Muslims in the population and several measures of Islamist terrorism for a cross-section of Western countries.¹ This paper extends Carl (2016)'s analysis by applying similar methods to a large crosssection of countries, which together encompass the vast majority of the world's territory and population. The paper's main aim is to quantify the strength of the cross- country associations between percentage of Muslims in the population and the frequency and severity of Islamist violence. Of particular interest is whether any associations survive controls for geographic, economic and institutional variables, and which regions of the world drive those associations.

2 Method

2.1 Measures

Two measures of Islamist violence were utilised: number of Islamist attacks 2001-2017 (logged), and casualties from Islamist violence 2001-2017 (logged). Both of these were generated using data from TheReligionOfPeace.com (2017a). This website compiles a list of Islamist attacks that have been carried out around the world since 9/11. Among other things, the list records the country in which the attack took place, as well as the number of deaths and the number of injuries sustained. Only incidents involving deadly violence that are deemed to have been motivated by religious duty are included. Since this encompasses honour killings as well as acts of political violence, the present paper refers to Islamist violence, rather than Islamist terrorism. It should be noted that the list is almost certainly incomplete. For further details as to how it is assembled, see the page 'About the List of Attacks' (TheReligionOfPeace.com, 2017b). The total number of attacks in each country and the total number of casualties (deaths + injuries) in each coun-

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¹ Recent references related to the subject of Islamist terrorism can be found in the Introduction to Carl (2016).

try were summed over the years 2001–2017. Note that both of these measures are strongly correlated with measures of Islamist terrorism that are available for Western countries (see Carl (2016); Appendix A of this paper, $\beta = .55-77$).

Percentage of Muslims in the population for 2010 was taken from Pew Research (2011). Two indicators of Western military intervention in the Middle East were utilised: number of military deaths sustained in the Iraq or Afghanistan wars (logged)², and a dummy variable for whether the country is part of the anti-ISIS military coalition. Both of these were taken from the dataset linked to Carl (2016): the former was generated using data from iCasualties.org (2016a,b); the latter is based on information reported by Wikipedia (2016). Total population in 2010 and GDP per capita (logged) were taken from the World Bank (2016a,b). The following measures were utilised as covariates: land area (logged), absolute latitude, average elevation, terrain roughness, legal origin, democracy, and ethnic fractionalisation. All of these were taken from the dataset linked to (Ashraf & Galor, 2013); details of each measure can be found in Section F of that paper's Online Appendix, which is available for download at the website of the American Economic Review.

2.2 Sample

The sample was restricted to countries which met the following two conditions (n = 168): first, information was available on percentage Muslim, total population, land area, absolute latitude, average elevation, terrain roughness, and legal origin; and second, total population in 2010 was greater than 300,000 (which is roughly the population of Iceland). Countries were assigned to one of six major world regions: Sub-Saharan Africa; South & East Asia; Eurasia; Latin American & Caribbean; Middle East & North Africa; and the West. These assignments were made by the author, based on the classifications by Huntington (1996) and the World Bank (2017). In particular, they are based on Huntington (1996)'s definition of 'The West', which encompasses Western and Central Europe (including the Baltics but not Greece), as well as the Englishspeaking former British colonies (US, Canada, Australia and New Zealand). Note that Eurasia encompasses South Eastern Europe, Russia, the Caucasus, and the central Asian 'stans'. These assignments are displayed in Figure 1. Furthermore, Table 1 presents descriptive statistics for the three main variables used in this study, broken down by region.

	Table	1: Descriptive	statistics for th	ie three main v	ariables, bro	ken down by reg	gion.		
		Islamist att	acks	Casualtie	s from Islar	nist violence		Percentage N	luslim
	Mean	min	тах	Mean	min	max	Mean	min	тах
Sub-Sahara Africa	75	0	1,434	1,516	0	38,132	33	0	66
South & East Asia	604	0	4,648	5,770	0	51,189	230	0	66
Eurasia	42	0	787	447	0	8,525	38	0	66
Latin America & Caribbean	0.1	0	1	1.3	0	32	01	0	16
Middle East & North Africa	661	0	9,285	14,485	0	215,216	86	18	66
The West	8.5	0	68	269	0	3,920	02	0	08

² The exact transformation applied was log of (1 + military deaths). 1 was added before log-transforming because the log of military deaths is undefined for countries with zero military deaths.



Figure 1: Map showing the world regions used in this study.

2.3 Methods

The analysis comprises a series of scatterplots and linear regression models in which the dependent variable is always a measure of Islamist violence. Note that the modelling approach taken here is slightly different to the one taken by Carl (2016), who utilised the log of Islamist terrorist attacks (\times 1,000,000) per capita and the log of casualties from Islamist terrorism (× 1,000,000) per capita as is his dependent variables. Rather than utilising per capita variables, the approach taken here is simply to include the log of total population in all regression models, which is an approach widely used in the conflict literature (e.g., Reynal-Querol (2002); Lacina (2006); Arbath et al. (2015)). This resulted in substantially more normally distributed residuals for the models of Islamist attacks. By contrast, utilising per capita variables resulted in highly non-normal residuals, as well as small and inconsistent betas, for these models.³

3 Results

3.1 Pooled associations

There was a strong association between the two measures of Islamist violence (conditional on log population): $\beta = .96$ (p < 0.001, n = 168).⁴ A scatterplot of this relationship is displayed in Figure 2. Associations within regions ranged from $\beta = .76$ (p = 0.001, n = 31) for the West to $\beta = 1.03$ (p < 0.001, n = 22) for South & East Asia. The association between percentage Muslim and log Islamist attacks (conditional on log population) was strong and highly significant: $\beta =$.48 (p < 0.001, n = 168). The association between percentage Muslim and log casualties from Islamist violence (conditional on log population) was also strong and highly significant: $\beta = .50$ (p < 0.001, n = 168). Scatterplots of these two relationships are displayed in Figure 3.

3.2 Within-region associations

Table 2 displays estimates from within-region OLS models of Islamist violence.⁵ Percentage Muslim has a significant positive association with both measures of Islamist violence within: Sub-Saharan Africa ($\beta = .35-36$), South & East Asia ($\beta = .49-50$), Eurasia ($\beta = .28-37$), and the West ($\beta = .35-46$). The associations within Latin America & Caribbean ($\beta = .16-19$) are weak, and those within Middle East & North Africa are negative ($\beta = .17-20$). Scatterplots of all these

³ When log of 1 + Islamist attacks per capita was regressed on percentage Muslim and the residuals were saved, the distribution was heavily right-skewed, and the single largest residual accounted for 67 % of the variance. When log of 1 + Islamist attacks per capita was regressed on percentage Muslim as well as region fixed-effects and covariates, the standardized beta for percentage Muslim was highly inconsistent across the various specifications. It ranged from $\beta = .31$ in the unconditional model to $\beta = 0.07$ in the model with region fixed-effects, basic controls and additional controls.

⁴ All p-values and significance tests reported in this paper are based on heteroskedasticity-robust standard errors (Wooldridge, 2002). If the error variance is higher when x is far from its mean, as appears to be the case in both panels of Figure 3, OLS standard errors are biased downwards. Heteroskedasticityrobust standard errors are adjusted upwards to account for this bias (Auld, 2012).

⁵ Emil O.W. Kirkegaard carried out a spatial autocorrelation analysis on the data, details of which can be found in the review thread for this paper. He observed only a small amount of spatial autocorrelation in the residuals, and found that adding a spatial predictor had little effect on the results.



Figure 2: Scatterplot of the relationship between log Islamist attacks (residuals) and log casualties from Islamist violence (residuals). Both variables have been residualized on log population. Each circle represents a different country. The lines are the unweighted least squares regression slopes.



Figure 3: Scatterplots of the pooled relationships between percentage Muslim and: log Islamist attacks (residuals); and log casualties from Islamist violence (residuals). Both dependent variables have been residualized on log population. Each circle represents a different country. The lines are the unweighted least squares regression slopes.

relationships are displayed in Figure 4 and Figure 5. Note that both the incidence of Islamist violence and the percentage of Muslims are very low in Latin America & Caribbean (see Table 1). Further investigation revealed that the negative associations within Middle East & North Africa were attributable to Israel being a major outlier (notice the circle on the left-hand side of Panel D in the two figures). When Israel was omitted, both associations became positive but very weak $(\beta_{Attacks} = .06, p = 0.8, n = 19; \beta_{Casualties} = .10, p =$ 0.8, n = 19). This makes sense given Israel's status as major target for Islamist terrorism, due to its ongoing conflict with certain armed factions within the Palestinian territories. Indeed, opinion polls indicate that the majority of Palestinians support attacks against Israel.⁶ For example, a 2014 poll found that 89 % support rocket attacks, and a 2015 poll found that 67 % support knife attacks PCPO (2014); PSR (2015).

3.3 Robustness to geographic, economic and institutional controls

Table 3 displays estimates from OLS models of Islamist violence with covariates. The basic controls comprise variables that are largely exogenous to contemporary social and economic development. Land area, absolute latitude, average elevation and terrain roughness capture aspects of geography and climate that might influence the risk of civil conflict. For example, suppose that countries nearer the equator tend to experience more civil conflict for climatic reasons. In that case, if countries nearer the equator tend to have larger Muslim populations, percentage Muslim will be confounded by absolute latitude. These variables--especially absolute latitude, land area, and legal origin--have become standard in cross-country regression analyses Ashraf & Galor (2013); Spolaore & Wacziarg (2013); Alesina et al. (2016). The additional controls comprise variables that capture contemporary social and economic development, as well as historical and contemporary migration patterns. For example, any effect of percentage Muslim on Islamist violence might be attributable to a tendency for countries with large Muslim populations to have higher levels of ethnic fractionalisation. Percentage Muslim has a significant positive association with Islamist violence in all 6 models ($\beta = .29-38$). The associations change comparatively little as more control variables are introduced, falling by 1-2 % of a standard deviation when basic controls are introduced, and falling by a further 6–7 % of a standard deviation when additional controls are introduced.

	Log(1 + Islamist attacks)	Log(1 + casu- alties										
							Islamist violence)	Islamist violence)	Islamist violence)	Islamist violence)	Islamist violence)	Islamist violence)
Percentage Muslim	0.35*	0.50**	0.28+	0.16	-0.20	0.46**	0.36	0.49**	0.37*	0.19	-0.17	0.35*
Log pop- ulation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region	Sub- Saharan Africa	South & East Asia	Eurasia	Latin Amer- ica &	Middle East & North	The West	Sub- Saharan Africa	South & East Asia	Eurasia	Latin Amer- ica &	Middle East & North	The West
	11111			Caribbean	Africa		not 111 7			Caribbean	Africa	
и	46	22	20	29	20	31	46	22	20	29	20	31
<i>Votes:</i> Entries	are standardi	sed betas. Sign	nificance leve	ls: + 0.1. * 0.0	5. ** 0.01. ***	0.001.						

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Table 2: Estimates from within-region OLS models of Islamist violence

⁶ Please note that nothing written in this paper should be taken as supporting one or other side in the conflict between Israel and Palestine.

3.4 Percentage Muslim versus military intervention in the Middle East

As Carl (2016) noted, two factors that could plausibly affect the frequency and severity Islamist violence across Western countries are: percentage of Muslims in the population, and military intervention in the Middle East. Regarding the former, it seems plausible that the higher the percentage of Muslims in the population, the greater the share of citizens susceptible to Islamist radicalisation, and therefore the larger the fraction of the population that the security services should need to monitor. For example, ISIS has been actively attempting to radicalise young Muslims living in Western countries by disseminating Jihadist propaganda through social media (Gates & Podder, 2015; Benmelech & Klor, 2016). Regarding the latter, it seems plausible that Islamist terror organisations such as Al Qaeda and ISIS might selectively target countries that have intervened militarily in Muslim countries. Indeed, a number of Islamist martyr videos refer explicitly to Western military aggression in the Middle East as the justification for jihad (Best, 2010; Pape & Feldman, 2010).

Carl (2016) found that both percentage Muslim and military intervention in the Middle East were associated with Islamist terrorism across Western countries. Yet there are several reasons why it is worth re-running the analysis here:

- 1. More data have become available since Carl (2016) was published.
- 2. As noted in Section 2, this paper takes a slightly different modelling approach to the one taken by Carl (2016).
- 3. Also as noted in Section 2, this paper utilises a slightly different definition of 'The West' to the one utilised by Carl (2016).

Table 4 displays estimates from OLS models of Islamist violence across Western countries. Log military deaths has a weak and non-significant raw association with both measures of Islamist violence (β = .21–30). By contrast, part of anti-ISIS coalition has a positive and significant raw association with both measures ($\beta = .38-52$). When percentage Muslim and log military deaths are entered simultaneously, each has a moderate-to-strong positive association with both measures of Islamist violence ($\beta = .42-58$). When percentage Muslim and part of anti-ISIS coalition are entered simultaneously, each has a moderate positive association with both measures of Islamist violence (β = .24–37), but only the associations with log Islamist attacks reach significance. Appendix A re-runs the analysis for the two alternative (but less

objective) measures of Islamist terrorism that were utilised by Carl (2016). Appendix B presents additional robustness/sensitivity checks.

4 Conclusion

This paper has examined the relationship between percentage of Muslims in the population (logged) and two separate measures of Islamist violence for a large cross-section of countries. The first measure of Islamist violence was the number of Islamist attacks 2001–2017 (logged); the second was the number of casualties from Islamist violence 2001-2017 (logged). Percentage Muslim was strongly associated with both measures of Islamist violence. These associations were not disproportionately driven by co-variation within one or two global regions: positive associations were found within Sub-Saharan Africa. South & East Asia, Eurasia, and the West. The raw associations within Latin America & Caribbean were weak, and those within Middle East & North Africa were negative. Yet the results for Middle East & North Africa were attributable to Israel being a major outlier; when Israel was omitted, very weak positive associations emerged. In a multiple regression analysis, both associations were robust to controlling for region fixedeffects, land area (logged), absolute latitude, average elevation, terrain roughness, legal origin, GDP per capita (logged), democracy, and ethnic fractionalisation. Consistent with Carl (2016), both percentage Muslim and indicators of military intervention in the Middle East were associated with Islamist violence across Western countries.

Supporting Information

Review thread at OpenPsych forum: https:// openpsych.net/forum/showthread.php?tid=298

Data, along with Stata code for replication: https://osf.io/43gbe/

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References

Alesina, A., Devleeschauwer, A., Easterly, W., Kurlat, S., & Wacziarg, R. (2003). Fractionalisation. *Journal* of Economic Growth, 8, 155–194.



Figure 4: Scatterplots of the within-region relationships between percentage Muslim and log Islamist attacks. Log Islamist attacks has been residualized on log population. Each circle represents a different country. The size of each circle is proportional to the country's population. The lines are the unweighted least squares regression slopes.

	Log(1 + Islamist attacks)	Log(1 + Islamist attacks)	Log(1 + Islamist attacks)	Log(1 + casualties Islamist violence)	Log(1 + casualties Islamist violence)	Log(1 + casualties Islamist violence)
Percentage Muslim	0.37***	0.36***	0.29**	0.38***	0.36***	0.30***
Log popula- tion	Yes	Yes	Yes	Yes	Yes	Yes
Region fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Basic controls		Yes	Yes		Yes	Yes
Additional controls			Yes			Yes
n	168	168	154	168	168	154
\mathbb{R}^2	0.55	0.60	0.61	0.59	0.63	0.64

Notes: Basic controls comprise: land area (logged), absolute latitude, average elevation, terrain roughness, and legal origin. Additional controls comprise: GDP per capita (logged), democracy, and ethnic fractionalisation. Entries are standardised betas. Significance levels: ⁺ 0.1, ^{*} 0.05, ^{**} 0.01, ^{***} 0.001.

Table 3: Estimates from OLS models of Islamist violence with covariates.



Figure 5: Scatterplots of the within-region relationships between percentage Muslim and log casualties from Islamist violence (residuals). Log casualties from Islamist violence has been residualized on log population. Each circle represents a different country. The size of each circle is proportional to the country's population. The lines are the unweighted least squares regression slopes.

	Log(1 + Islamist attacks)	Log(1 + Islamist attacks)	Log(1 + Islamist attacks)	Log(1 + Islamist attacks)	Log(1 + casu- alties Islamist violence)	Log(1 + casu- alties Islamist violence)	Log(1 + casu- alties Islamist violence)	Log(1 + casu- alties Islamist violence)
Log(1 + mil. deaths)	0.30		0.58***		0.21		0.42*	
Part of anti-ISIS coalition		0.52***		0.37**		0.38*		0.26
Percentage Muslim			0.58***	0.31**			0.43**	0.24+
Log population	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
п	31	31	31	31	31	31	31	31
\mathbb{R}^2	0.57	0.74	0.83	0.8	0.56	0.65	0.71	0.69

Notes: Entries are standardised betas. Significance levels: + 0.1, * 0.05, ** 0.01, *** 0.001.

Table 4: Estimates from OLS models of Islamist violence across Western countries.

- Alesina, A., Michalopoulos, S., & Papaioannou, E. (2016). Ethnic inequality. *Journal of Political Economy*, 124, 428–488.
- Arbath, C., Ashraf, Q., & Galor, O. (2015). *The nature* of conflict.
- Ashraf, Q., & Galor, O. (2013). The 'out of africa' hypothesis, human genetic diversity, and comparative economic development. *American Economic Review*, 103, 1–46.
- Auld, C. (2012). The intuition of robust standard errors. *Economics, Econometrics, etc.*.
- Benmelech, E., & Klor, E. (2016). What explains the flow of foreign fighters to isis?
- Best, S. (2010). Liquid terrorism: Altruistic fundamentalism in the context of liquid modernity. *Sociology*, 44, 678–694.
- Carl, N. (2016). An analysis of islamist terrorism across western countries. *Open Quantitative Sociology & Political Science*.
- Europol. (2016). TE-SAT: EU Terrorism and Trend Report 2007–2016 (Tech. Rep.).
- Fearon, J. (2003). Ethnic and cultural diversity by country. *Journal of Economic Growth*, *8*, 195—222. doi: 10.1023/A:1024419522867
- Gates, S., & Podder, S. (2015). Social media, recruitment, allegiance and the islamic state. *Perspectives on Terrorism*, *9*, 107–116.
- Huntington, S. P. (1996). The clash of civilizations and the remaking of the world order. Simon & Schuster.
- iCasualties.org. (2016a). Operation enduring freedom: Fatalities by country. Retrieved from http:// icasualties.org/
- iCasualties.org. (2016b). Operation iraqi freedom: Fatalities by country. Retrieved from http:// icasualties.org/
- Kirkegaard, E. O. W. (2014). *Worldwide megadataset,* v1.5. Retrieved from https://osf.io/zdcbq/
- Lacina, B. (2006). Explaining the severity of civil wars. *Journal of Conflict Resolution*, 50, 276--289.
- Pape, R., & Feldman, J. (2010). *Cutting the fuse: The explosion of global suicide terrorism and how to stop it.* University of Chicago Press.
- PCPO. (2014). Poll no. 191. palestinian center for public opinion. Retrieved from https://www.pcpo.org/ index.php/polls/114-poll-no-191

- Pew Research. (2011). Table: Muslim population by country. Pew Research Centre, Religion and Public Life. Retrieved from http://www.pewforum.org/2011/01/27/ table-muslim-population-by-country/
- PSR. (2015). Palestinian public opinion poll no (58). Palestinian Center for Policy and Survey Research. Retrieved from http://www.pcpsr.org/en/node/ 625
- Reynal-Querol, M. (2002). Ethnicity, political systems, and civil wars. *Journal of Conflict Resolution*, 46, 29–54.
- Spolaore, E., & Wacziarg, R. (2013). How deep are the roots of economic development? *Journal of Economic Literature*, 51, 325–369.
- TheReligionOfPeace.com. (2017a). About the list of attacks. Retrieved from https:// www.thereligionofpeace.com/pages/site/ the-list.aspx
- TheReligionOfPeace.com. (2017b). List of islamic terror attacks. Retrieved from https://www.thereligionofpeace.com/ attacks/attacks.aspx?Yr=2001
- Wikipedia. (2016). International military intervention against ISIL. Retrieved from https:// en.wikipedia.org/wiki/International _military_intervention_against_ISIL
- Wooldridge, A. (2002). *Econometric analysis of cross* section and panel data. MIT Press.
- World Bank. (2016a). GDP per capita, PPP (current international \$). World Bank World Development Indicators. Retrieved from https://data.worldbank .org/indicator/NY.GDP.PCAP.PP.CD
- World Bank. (2016b). Population, total. World Bank World Development Indicators. Retrieved from https://data.worldbank.org/indicator/ SP.POP.TOTL
- World Bank. (2017). *Regions*. Retrieved from http://datatopics.worldbank.org/ world-development-indicators/the-world-by -income-and-region.html

Appendix A

Carl (2016) utilised two alternative measures of Islamist terrorism: first, the terrorism threat level reported by the Foreign and Commonwealth Office of the British government (FCO) on the day of the Brussels terrorist attacks, taken from Smith (2016); and second, the number of arrests for religiously inspired terrorism, taken from Europol's annual report entitled 'TE-SAT: EU Terrorism Situation and Trend Report' (Europol, 2016). Note that the latter was only available for 26 EU countries: all those except Croatia, which did not accede until 2013, and the UK, which does not provide arrests broken down by category. For further details, see Carl (2016) (including the post-publication supplement); in particular, note the caveat regarding FCO terrorism threat level.

	Log (1 + Islamist attacks)	Log (1 + casualties from Islamist vio- lence)	FCO terrorism threat level	Log (1 + arrests for religious ter- rorism)
Log (1 + Islamist at- tacks)	1			
Log (1 + casualties from Islamist vio- lence)	0.76***	1		
FCO terrorism threat level	0.74***	0.77***	1	
Log (1 + arrests for religious terrorism)	0.61***	0.69***	0.55***	1

Notes: Each value is the standardized beta from a regression model that includes log population. For the values in the second and third rows, n = 31 (all Western countries). For the values in the fourth row, n = 26 (all EU countries minus Croatia and the UK). Significance levels: + 0.1, * 0.05, ** 0.01, *** 0.001.

 Table A.1: Standardized betas for relationships between Islamist terrorism measures.

Table A.1 displays standardised betas quantifying the strength of the relationships between log Islamist attacks, log casualties from Islamist violence, FCO terrorism threat level, and log arrests for religious terrorism. The associations range from strong to very strong in magnitude ($\beta = .55-77$). All are highly significant. Figure A.1 displays scatterplots of these relationships.

Table A.2 displays estimates from OLS models of FCO terrorism threat level, and log arrests for religious terrorism. Percentage Muslim has a strong raw association with FCO terrorism threat level (β = .49), and has a moderate raw association with log arrests for religious terrorism (β = .31). Log military deaths has a weak and non-significant raw association with both measures of Islamist terrorism (β = -.05–15). By contrast, part of anti-ISIS coalition has a strong raw association with FCO terrorism threat level (β = .50), and a moderate raw association with log arrests for religious terrorism (β = .36). When percentage Muslim and log military deaths are entered simultaneously in the model of FCO terrorism threat level, only percentage Muslim has a significant positive effect (β = .53). When they are entered simultaneously in the model of log arrests for religious terrorism, only percentage Muslim has a significant positive effect (β = .33–35). When they are entered simultaneously in the model of FCO terrorism threat level, both variables have a moderate positive effect (β = .33–35). When they are entered simultaneously in the model of log arrests for religious terrorism, both variables have a moderate positive effect (β = .24–29).

	FCO ter- rorism threat level	Log (1 + arrests re- ligious ter- rorism)								
Percentage Muslim)	0.49**			0.53***	0.35*	0.31*			0.32*	0.24*
Log(1 + Military deaths)		-0.05		0.21			0.15		0.20	
Part of anti-ISIS coalition			0.50**		0.33+			0.36*		0.29*
Log pop- ulation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
и	31	31	31	31	31	26	26	26	26	26
\mathbb{R}^2	0.64	0.43	0.62	0.65	0.70	0.58	0.49	0.59	0.60	0.65
Notes: Entrie	s are standard	ised betas. Sig	nificance leve	ils: + 0.1, * 0.0	05, ** 0.01, ***	0.001.				

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Table A.2: Estimates from OLS models of alternative measures of Islamist terrorism.



Figure A.1: Scatterplots of the relationships between measures of Islamist violence and terrorism. All four variables have been residualized on log population. Each circle represents a different country. The size of each circle is proportional to the country's population. The lines are the unweighted least squares regression slopes.

Appendix **B**

Table B.1 presents some additional robustness/sensitivity checks. The first row confirms that the conditional association between percentage Muslim and Islamist violence is about the same magnitude when combining the two dependent variables. The second and third rows confirm that the conditional association between percentage Muslim and Islamist violence is the same magnitude when geographic controls are omitted. The fourth and fifth rows confirm that the conditional association is about the same magnitude when log absolute Muslim population is utilised instead of percentage Muslim. The sixth, seventh eighth and ninth rows confirm that the conditional association is the same magnitude when utilising alternative measures of ethnic fractionalisation. The tenth and eleventh rows indicate that the effect of log absolute Muslim population on Islamist terrorism is stronger in countries with larger populations (both interaction terms have positive coefficients). The twelfth and thirteenth rows indicate that there is tentative evidence of a non-linear effect of percentage Muslim on log casualties from Islamist terrorism, but no evidence of a non-linear effect of percentage Muslim on log Islamist terror attacks.

Specification	Description of output	Output	n
Same as third column of Table 3, but dependent variable is post-standardisation mean of log Is- lamist attacks and log casualties from Islamist vio- lence	Standardised beta for percentage Muslim	0.30***	154
Same as third column of Table 3, but without geo- graphic controls	Standardised beta for percentage Muslim	0.30***	154
Same as sixth column of Table 3, but without geo- graphic controls	Standardised beta for percentage Muslim	0.30***	154
Same as third column of Table 3, but independent variable is log absolute Muslim population	Standardised beta for log absolute Muslim population	0.24***	154
Same as sixth column of Table 3, but independent variable is log absolute Muslim population	Standardised beta for log absolute Muslim population	0.26***	154
Same as third column of Table 3, but with religious fractionalisation instead of ethnic fractionalisation	Standardised beta for percentage Muslim	0.34***	155
Same as sixth column of Table 3, but with religious fractionalisation instead of ethnic fractionalisation	Standardised beta for percentage Muslim	0.38***	155
Same as third column of Table 3, but with a princi- pal component of fractionalisation instead of ethnic fractionalisation	Standardised beta for percentage Muslim	0.28***	148
Same as sixth column of Table 3, but with a princi- pal component of fractionalisation instead of ethnic fractionalisation	Standardised beta for percentage Muslim	0.29***	148
Same as third column of Table 3, but with an inter- action term for log absolute Muslim population \times log total population	<i>p</i> -value for interaction term	<i>p</i> < 0.001	154
Same as sixth column of Table 3, but with an inter- action term for log absolute Muslim population \times log total population	<i>p</i> -value for interaction term	<i>p</i> < 0.001	154
Same as third column of Table 3, but with a quadratic term in percentage Muslim	<i>p</i> -value for quadratic term	<i>p</i> = 0.1	154
Same as sixth column of Table 3, but with a quadratic term in percentage Muslim	<i>p</i> -value for quadratic term	<i>p</i> = 0.026	154

Notes: All additional measures of fractionalisation were taken from v1.5 of the Worldwide Megadataset compiled by Kirkegaard (2014). The principal component of fractionalisation was obtained by extracting the first principal component from a PCA on 5 measures: Fearon (2003)'s measure of ethnic diversity, Fearon (2003)'s measure of cultural diversity, Alesina et al. (2003)'s measure of ethnic fractionalisation (used in Table 3), Alesina et al. (2003)'s measure of linguistic fractionalisation, and Alesina et al. (2003)'s measure of religious fractionalisation. This component had an eigenvalue of 3.4 and explained 67 % of the variance. Significance levels: + 0.1, * 0.05, ** 0.01, *** 0.001.

Table B.1: Additional robustness/sensitivity checks