

**Altars and Ammunition:
The Effect of Religious Freedom on Civil War**

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Abstract

This study examines the impact of religious freedom on the onset of civil war. It explores how governmental restrictions on religious practices exacerbate social divisions, foster mistrust, and heighten the risk of violence. Using variables like ethnic fractionalization, GDP per capita, life expectancy, and unemployment rates as controls, robust statistical models validate the hypothesis that increased religious freedom significantly reduces the likelihood of civil war. The findings highlight religious freedom as an important policy to consider and an effective tool for domestic stability.

Introduction

The media is flooded with reports of violent conflicts around the world. Between the years 1945 and 1999, wars within countries accounted for roughly 16 million deaths, more than five times the death toll from wars between countries during the same time (Fearon and Laitin 2003). Since the year 2000, there has been a general rise in violent conflicts globally (Svensson, Schaftenaar, and Allansson 2022).

Years of research have explored political and economic causes of conflict, and now much is being studied about social, identity, and cultural factors. However, there is still much to be learned about the interplay between the two categories. Religious factors—such as divisions between religious groups or religious ideologies cited as motivation to fight—play a role in many violent conflicts. Studying the relationship between the state government and religion, specifically religious freedom, will give further insight into the sociopolitical causes of conflict. In this article, we will look more specifically at varying levels of religious freedom and their effect on the onset of civil war.

Civil War

One well-established cause of civil conflict is the level of development in a country. Low national income, economic stagnation, and high levels of unemployment contribute significantly to the onset of civil conflict (Collier et al. 2000; Stewart, Holdstock, and Jarquin 2002). Another economic cause of civil war is the prevalence of commodity primary exports as part of a country's market (Collier and Hoeffler 2004). However, there is much debate as to the extent of the effect of this factor, as is the case with many economic factors (Fearon 2005).

There are also important social causes. Civil unrest in a developing country is motivated not only by grievances from extreme poverty but also by social conditions such as large-scale ethnic or religious discrimination (Anderson 2018). Indeed, ethnic or ethnolinguistic fractionalization is often included in statistical models analyzing civil war, although with varying uses and results (Collier and Hoeffler 1998; Blimes 2006).

Some research also suggests that infectious diseases have an impact on the onset of civil war. Kustra (2017) analyzed how an epidemic's effect on average life expectancy can alter a population's willingness to enter conflict by lowering the opportunity cost of how many years they might live if they do not go to war. Other research looks at how epidemics socialize for mistrust and strengthen "xenophobic and ethnocentric cultural norms," thus making civil war more likely (Letendre, Fincher, and Thornhill 2010).

The theory of "relative deprivation" is a factor that connects both economic and social causes (Gurr 2017, 128). Groups that perceive they have less of something than other groups, with no way to change that imbalance, are more likely to view conflict as a legitimate means to change their circumstances. However, despite the discussion on conflicts based on religious differences, there has not been much research on how relative deprivation of the freedom to express one's religious beliefs influences conflict. Although there is much helpful research on the role of identity in conflict, existing research leaves room for more to be learned about how religion—an essential part of identity—causes conflict (Homer-Dixon 1991).

Sherif (2015) adds insightful findings to the conversation on the causes of conflict through an analysis of group identities and their effects on acute conflict, particularly through the development of psychological barriers between groups. However, this research,

along with many others on the role of identity in conflict, uses operational definitions for identity that come through lenses that limit the ability to measure the impact of other important factors, one of which is religion. The existing research so far leaves room for more to be learned about how this essential part of identity causes conflict.

Religious Freedom

Attacks on an aspect of identity feel especially threatening to individuals, as do perceived attacks on a group with whom they identify. When this occurs, individuals of the group turn inwards towards each other, create sharp boundaries between them and opposing groups, and put up their defenses. This sets the stage for deeply entrenched conflict. Vamik Volkan (2014, 11), an acclaimed psychosociologist, names this phenomenon “group regression” and explains how large groups experiencing threats make decisions based on their group identity more than their individual identities and are more likely to engage in conflict.

Group regression amplifies when a religious group feels threatened. Religion begins with the way an individual understands the ultimate laws of the universe; as religion shapes the way individuals see the world, it largely defines their identities and heavily influences conflict. Religion’s influence on conflict, however, comes from essential social ties and shared group identities based on religious affiliation rather than merely particular religious beliefs.

Governmental restrictions on religious freedom act as a catalyst for group regression, encouraging fear in individuals whose beliefs are being limited and causing them to “rally ’round the flag.” Social aspects of religious freedom, such as religious

discrimination or biased views on a religious group, have the same effect. These policies and attitudes also cause greater disparities between religious majorities and religious minorities, sharpening boundaries and drawing deep lines of fear. This fear of the people on the other side leads to a socialization of mistrust and is a factor in the presence of war (Ember and Ember 1992). As relationships continue to break down between both sides and instances of social harassment increase, the chance of conflict increases.

The bridge between this setting of fear and actual instances of conflict can be explained by an important aspect of group regression: “chosen traumas” (Volkan 2014, 50). The collective memory held by a group drives mobilization. Instances of significant harm or loss experienced by the group in the past become motivation to engage in conflict, even if they occurred centuries in the past, through what Volkan (2014, 50) calls a “time collapse.”. Religion plays a large role in shaping collective memory through things such as rituals, sacred texts, and strong group ties. Thus, groups formed on the basis of religious identity have an especially large and powerful pool of collective memory to draw upon to initiate mobilization. This mobilization manifests in many forms of conflict; in this paper, we will specifically study civil war.

Another way religion—and religious grievances such as restrictions on freedom—affect conflict is through its effect on the process of conflict resolution, as parties are less likely to believe they have any common ground with the opposing forces. Reychler (1997, 21) describes this effect as such:

When conflicts are couched in religious terms, they become transformed in value conflicts. Unlike other issues, such as resource conflicts which can be resolved by pragmatic and distributive means, value conflicts have a tendency to become mutually conclusive or zero-sum issues.

Although conflicts have other factors besides religion, adding the element of religious motivation increases the chances that groups will view violent conflict as the best course of action.

However, religion is not only a force that entrenches conflict but one that can de-escalate conflict, promote understanding, facilitate healing, and strengthen institutions of peace. Much research has been done about the role that religion can play in addressing conflict (Appleby 2001; Brewer, Higgins, and Teeney 2010; Smock 2006). We argue that in order to play a positive role, religious groups must be secure and able to function freely. For example, a religious leader will have a harder time encouraging believers to find common ground with others if in a country where he or she has no freedom to speak freely. Thus, the level of religious freedom in a country affects religious groups' tendency to be forces for peace rather than forces for conflict.

Hypothesis: We hypothesize that an increase in religious freedom leads to a decrease in the onset of civil war, *ceteris paribus*.

Methods

The dependent variable in this study, which we named *civwar*, is a dichotomous variable that measures the onset of civil war by country. It was sourced from the UCDP/Prio Armed Conflict Dataset from the Uppsala Conflict Data Program, which has data on various types of armed conflict from the years 1946 to 2023 (Strand, Wilhelmsen, and Gleditsch 2003). We created our variable to include only instances of intrastate armed conflict, which they define as “fighting between the government of a state and one or more

internal opposition group(s) resulting in at least twenty-five deaths per year” (Braithwaite and Licht 2020).

Religious freedom, the primary independent variable, is measured using the V-Dem indicator *v2clrelig*. This indicator comes from the Varieties of Democracy (V-Dem) Project and ”specifies the extent to which individuals and groups have the right to choose a religion, change their religion, and practice that religion in private or in public as well as to proselytize peacefully without being subject to restrictions by public authorities” (Coppedge et al. 2020). The variable is comprised of an ordinal scale, with higher numbers indicating greater religious freedom. It has data from the years 1789 to 2023.

We include ethnic fractionalization, GDP per capita, GDP growth, life expectancy, the percentage of the population being males aged 20-24 years, agricultural raw material exports, and national level of unemployment as control variables in our various statistical models. These factors were carefully selected based on our literature review and simple regression tests, which indicated these factors have statistically significant relationships with both the level of religious freedom in a country and the onset of civil war. This made these variables relevant and necessary for testing our hypothesis in order to avoid omitted variable bias.

Ethnic fractionalization has been operationalized by Drahanova and is labeled as *EFindex* from the Historical Index of Ethnic Fractionalization (HIEF) dataset (Drahanova 2019). Drahanova says:

Based on the annual percentage of ethnic groups in each country The Historical Index of Ethnic Fractionalization (hereafter, HIEF) calculates the degree of ethnic fractionalization (EF) using the most universally applied formula in the empirical literature, which is a decreasing transformation of the Herfindahl concentration index measured by:

$$EF_c = 1 - \sum_{i=1}^n S_i^2$$

where EF_c is the level of ethnic fractionalization in country c , i indexes ethnic groups, and S_i is the proportion of the population in unit c belonging to ethnic group i ($i = 1, \dots, n$). Theoretically, the ethnic fractionalization index reflects the likelihood that two people chosen at random within a given country will be from different ethnic groups. The ethnic fractionalization index ranges from 0, when there is no ethnic fractionalization and all individuals are members of the same ethnic group to 1, where each individual belongs to his or her own ethnic group.

We also control for GDP per capita as found in the World Development Indicators data bank, labeled as *GDPpercapitacurrentUS* (World Bank 2024). This measure calculates a country's gross domestic product "divided by midyear population." We chose to measure economic growth using the GDP growth variable in the World Development Indicators, *Grgdppc* (World Bank 2024). GDP growth is the "annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2015 prices, expressed in U.S. dollars."

Our measurement for life expectancy, *Lifexpectancyatbirthtotal*, also comes from the World Development Indicators and is defined as "the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life" (World Bank 2024). We selected this variable to control for both the level of development in a country and for the effects of disease, as described in our literature review.

All remaining control variables come from the World Development Indicators dataset (World Bank 2024). We control for countries with high percentages of their population being males aged 20-24 using *Populationages2024maleo* and for the percent of a country's merchandise exports being agricultural raw materials using

Agriculturalrawmaterialsexpor. The percentage of the total national labor force that is unemployed is measured using *Unemploymenttotaloftotal*.

In our study, we included all countries for which data was available within the datasets we used. For most of our models, this means analyzing data within the years 1960-2023. One limitation that arises from using the data in the UCDP/Prio dataset to create a dichotomous variable comes from relying on the dataset to accurately list all cases of civil war that occurred in the countries and years we analyze. Another major limitation comes from the issue of the availability of data. As we include more control variables in our statistical models, the number of observations decreases, indicating that for many countries and years, there is no data available. This has the potential to skew our analysis, especially if there is a correlation between missing data and the level of development of a country.

Our study is also limited by the need to operationalize our research on conflict and the use of a measure for civil war. This excludes other important forms of violent conflict from the research. However, our models were created with the best measures available to us. We intentionally selected indicators from well-established data sources as a way to minimize the effect of measurement error. We will reject the null hypothesis if our analysis yields a statistically significant relationship between religious freedom and the onset of civil war, holding all other variables constant.

Results

We began our study by determining the relationship between possible control variables and civil war, then repeated the process for religious freedom. The data clearly presented that ethnic fractionalization, GDP annual growth, GDP per capita, infant

mortality rate, total male population, agricultural raw material export, and unemployment rates were all significantly related to both civil war and religious freedom. We then compiled four models using various combinations of our variables based on criteria such as the number of observations and statistical significance, with our first model (Model 1) analyzing civil war with religious freedom, GDP annual growth, GDP per capita infant mortality, and percent of the population being male aged 20-24. We chose to use logistic regression due to the dichotomous nature of our dependent variable.

Table 1. Logistic Regression on Civil War

	(Model 1)	(Model 2)	(Model 3)	(Model 4)
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civwar				
v2clrelig	-0.4054*** (0.0246)	-0.3405*** (0.0325)	-0.3295*** (0.0321)	-0.2398*** (0.0451)
efindex	0.6642*** (0.1418)	0.8050*** (0.1730)	0.7035*** (0.1630)	1.7004*** (0.2515)
GDPgrowthannual	-0.0162*** (0.0046)	-0.0008 (0.0081)		-0.0293* (0.0139)
GDPpercapitacurrentUS	-0.0001*** (0.0000)	-0.0001*** (0.0000)	-0.0001*** (0.0000)	-0.0001*** (0.0000)
Lifeexpectancyatbirthtotal	-0.0103** (0.0038)	0.0059 (0.0053)		-0.0194 (0.0110)
Populationages2024maleo	0.1066** (0.0330)	0.1107** (0.0411)	0.1200** (0.0403)	0.0760 (0.0575)
Agriculturalrawmaterialsexpor		0.0155*** (0.0032)	0.0144*** (0.0030)	-0.0105 (0.0084)
Unemploymenttotaloftotal				-0.0237* (0.0103)
_cons	-2.1026*** (0.3427)	-3.3687*** (0.4841)	-3.0531*** (0.3770)	-0.9730 (0.9742)
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<i>N</i>	10168	6705	6840	3254
pseudo R^2	0.0856	0.0772	0.0774	0.1209
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Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

As seen in Table 1, the null hypothesis can be rejected across all models. As a country's religious freedom measure increases, the likelihood of a civil war occurring

decreases, holding all other things constant. As we added more control variables in subsequent models, the relationship remained significant. Something to be noted, however, is that as we add more variables, the number of observations decreases and the standard errors increase. Next, we investigated if the models violated any statistical assumptions.

Table 2. Logistic Regression on Civil War Using Robust Standard Errors

	(Model 1)	(Model 2)	(Model 3)	(Model 4)
civwar				
v2clrelig	-0.4054*** (0.0246)	-0.3405*** (0.0325)	-0.3295*** (0.0321)	-0.2398*** (0.0451)
efindex	0.6642*** (0.1418)	0.8050*** (0.1730)	0.7035*** (0.1630)	1.7004*** (0.2515)
GDPgrowthannual	-0.0162*** (0.0046)	-0.0008 (0.0081)		-0.0293* (0.0139)
GDPpercapitacurrentUS	-0.0001*** (0.0000)	-0.0001*** (0.0000)	-0.0001*** (0.0000)	-0.0001*** (0.0000)
Lifeexpectancyatbirthtotal	-0.0103** (0.0038)	0.0059 (0.0053)		-0.0194 (0.0110)
Populationages2024maleo	0.1066** (0.0330)	0.1107** (0.0411)	0.1200** (0.0403)	0.0760 (0.0575)
Agriculturalrawmaterialsexpor		0.0155*** (0.0032)	0.0144*** (0.0030)	-0.0105 (0.0084)
Unemploymenttotaloftotal				-0.0237* (0.0103)
_cons	-2.1026*** (0.3427)	-3.3687*** (0.4841)	-3.0531*** (0.3770)	-0.9730 (0.9742)
<i>N</i>	10168	6705	6840	3254
pseudo R^2	0.0856	0.0772	0.0774	0.1209

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

When testing our models, we discovered they all had an issue with heteroskedasticity and autocorrelation, although multicollinearity was not an issue in any of them. To remedy

the heteroskedasticity, we used robust standard errors (see Table 2 above). To correct the autocorrelation, we first attempted to include a lagged endogenous variable in our models. However, this was insufficient to solve the autocorrelation problem. Next, we tried using the Prais-Winsten method. This solved the issue of autocorrelation, but it may not be a good fit for our dichotomous dependent variable. We were also required to collapse our data using their means to set our data as panel data, due to there being a few cases of multiple observations for the same year. This resulted in a smaller sample size for our tests; however, there was still a sufficient number for solid statistical analyses. Table 3 displays the adjusted data using both robust standard errors and the Prais-Winsten model.

Table 3. Prais-Winsten Analysis of Civil War Using Robust Standard Errors

	(Model 1)	(Model 2)	(Model 3)	(Model 4)
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civwar				
v2clrelig	-0.0240** (0.0075)	-0.0195* (0.0080)	-0.0224** (0.0081)	-0.0268* (0.0113)
efindex	0.1543*** (0.0450)	0.1247* (0.0494)	0.1212** (0.0426)	0.1350* (0.0637)
GDPgrowthannual	-0.0015** (0.0005)	-0.0002 (0.0004)		-0.0013 (0.0009)
GDPpercapitacurrentUS	-0.0000* (0.0000)	-0.0000*** (0.0000)	-0.0000*** (0.0000)	-0.0000** (0.0000)
Lifeexpectancyatbirthtotal	-0.0013 (0.0012)	0.0001 (0.0015)		-0.0057* (0.0028)
Populationages2024maleo	0.0034 (0.0057)	0.0069 (0.0063)	0.0063 (0.0064)	-0.0012 (0.0097)
Agriculturalrawmaterialsexpor		-0.0007 (0.0008)	-0.0007 (0.0007)	-0.0038** (0.0012)
Unemploymenttotaloftotal				-0.0046* (0.0019)
_cons	0.1560 (0.0971)	0.0515 (0.1209)	0.0631 (0.0568)	0.6153* (0.2462)
<hr/>				
<i>N</i>	6446	4654	4689	2554
<i>R</i> ²	0.0090	0.0115	0.0116	0.0447

Standard errors in parentheses

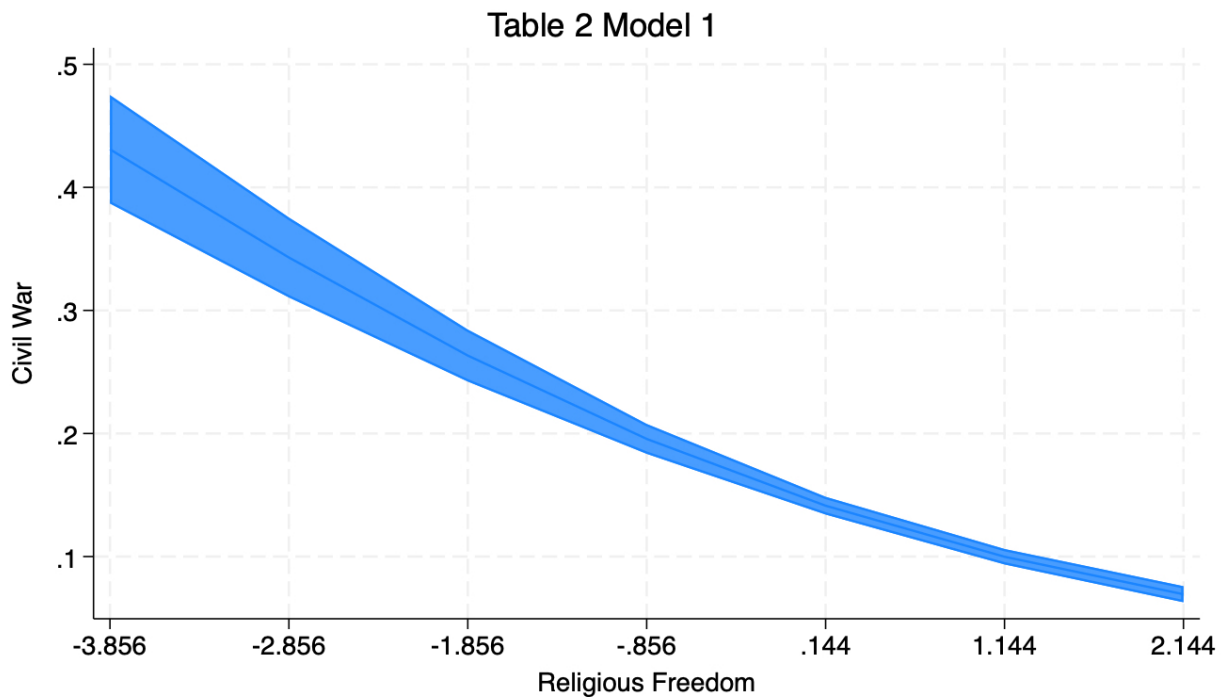
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

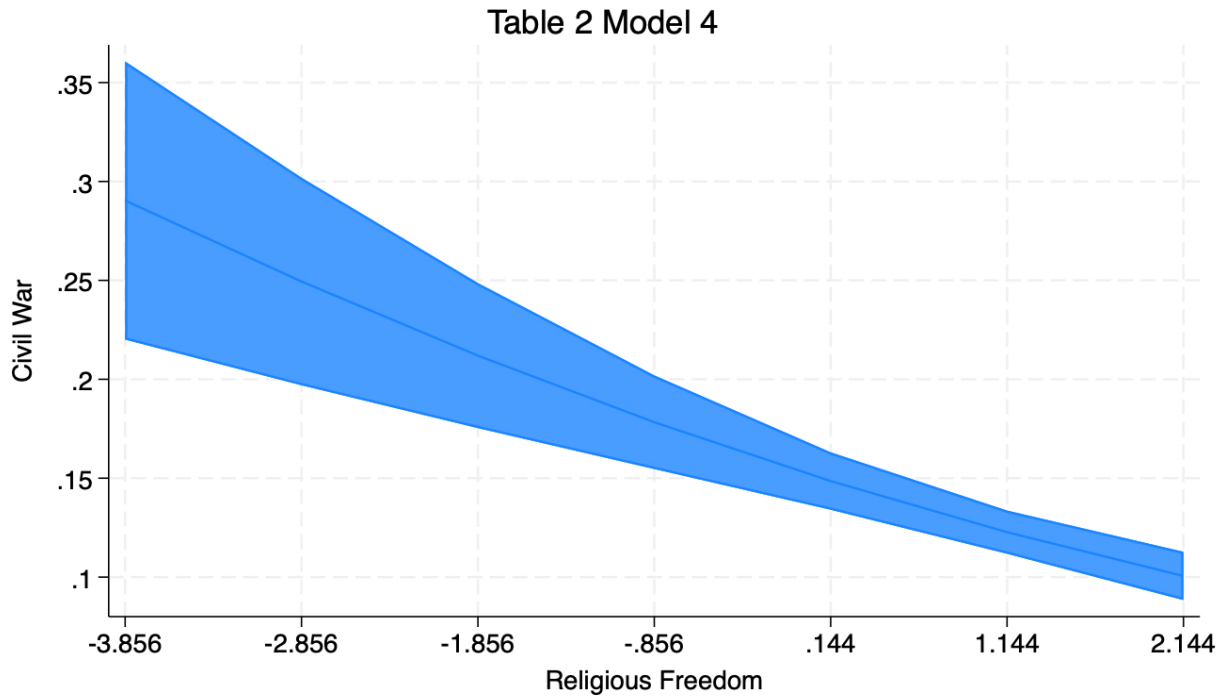
Making these adjustments not only changed our coefficients but also reduced our standard errors drastically, increasing the reliability of our data. As shown in Model 1,

even when using robust standard errors and the Prais-Winsten model to correct the issues with heteroskedasticity and autocorrelation, freedom of religion still has a statistically significant relationship with the onset of civil war. As a country's level of religious freedom increases, its likelihood of experiencing civil war decreases, holding all other things constant. The same can be said for Models 2, 3, and 4.

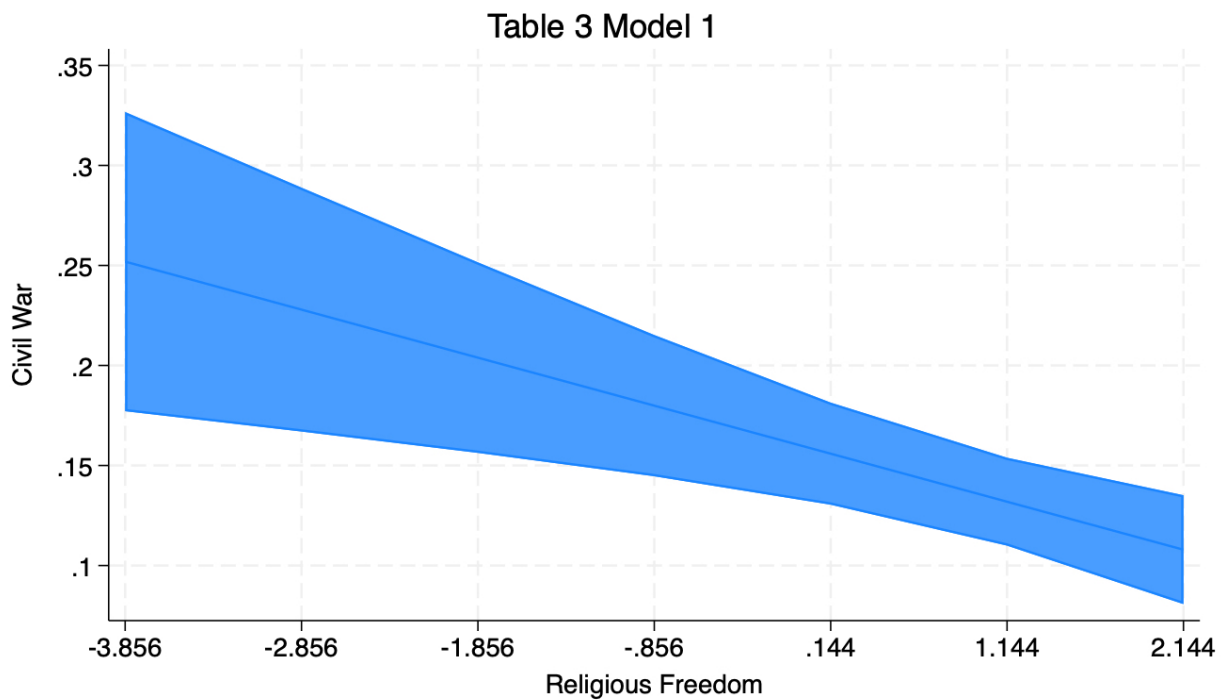
It is worth noting how the total unemployment rate affects religious freedoms and civil war. When adding in unemployment, we see an increase in the standard of error and a decrease in significance. However, this is likely due to a decrease in the sample size of the model.

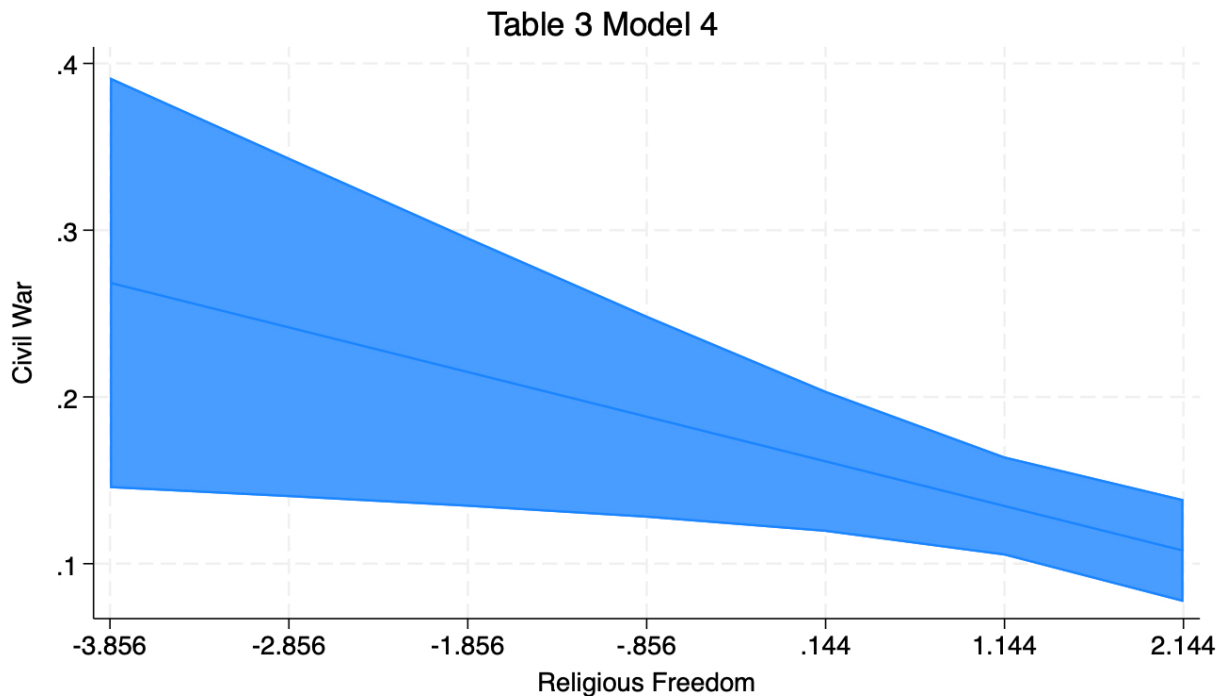
The following graphs illustrate the results found in Models 1 and 3 from Table 2 with robust standard errors and a logistic regression.





The following graphs illustrate the results found in Models 1 and 3 from Table 3 with robust standard errors and a Prais-Winsten model.





In every model analyzed, there is a statistically significant relationship between freedom of religion and the onset of civil war, allowing us to reject the null hypothesis. However, testing different models resulted in a variation in the size of standard errors, as well as the level of substantial significance. Using a logistic regression resulted in smaller standard errors and more clear substantial significance, but it has an issue with autocorrelation. The models that use the Prais-Winsten method do not have an issue with autocorrelation, but they do have very large standard errors, perhaps due to the poor fit of the model with the dichotomous nature of our dependent variable.

Discussion

There are many important economic factors that affect the onset of civil war, such as those measuring the level of development in a country (Collier et al. 2000; Stewart, Holdstock, and Jarquin 2002). However, there are also many significant social factors that

increase the likelihood of individuals choosing violence as a viable option for solving their problems, such as those that exacerbate mistrust or amplify divisions between social groups (Letendre, Fincher, and Thornhill 2010; Volkan 2014). Our research explores one way that religion—both a force for conflict and a force for peace—affects the onset of civil war. The level of religious freedom in a country, which affects both social divisions and religious organizations’ ability to encourage peace, is an essential piece to understanding this relationship. Even when treating for violations of statistical assumptions, our data reveals a significant relationship between religious freedom and civil war, leading us to reject the null hypothesis. As the level of religious freedom in a country increases, the onset of civil war decreases.

Therefore, we see that religious freedom is an important factor for policymakers concerned with domestic stability to consider. Both countries that experience civil wars frequently and those that have had many years with no large conflict will find useful an increased understanding of how religious freedom helps protect against civil war.

Additionally, whether a country has low or high religious freedom, policymakers should seek out ways to continuously establish policies with ever-increasing religious freedom.

Individuals and organizations that oversee foreign aid will also benefit from this greater insight into a country’s stability and chances of civil war. As seen in our results, religious freedom is more than a human right; it is a resource for national and global peace if policymakers are to implement it into their decision-making processes.

Much remains to be discovered about religion’s role in conflict. Valuable research in the future would include investigating the effect of religious freedom on other important types of conflict that do not reach the scale of civil war, such as violent protest. There are

also several other factors of religion that would be helpful to explore, such as religious diversity or the level of extrinsic or intrinsic religiosity. Overall, studying the effect of religion, and religious freedom in particular, provides critical insight into conflict and the onset of civil war.

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