The Impact of Anti-Veiling Legislation on Employment Outcomes and Religiosity

The Impact of Anti-Veiling Legislation on Employment Outcomes and Religiosity

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Abstract

Eight different European Union member countries and counting have policies that prevent residents from wearing the hijab, burqa, or niqab in public spaces. The practice of veiling itself has unique implications as a commitment mechanism and socioeconomic signal (Carvahlo, 2013), which suggest that anti-veiling legislation would decrease social integration between religious groups. I study the impacts of anti-veiling legislation in Germany with a difference in differences approach, using two data sets on labor market outcomes and perception of society (the German Socio-Economic Panel and International Social Survey Programme Religion Survey) and find that anti-veiling legislation did not have statistically significant effects on church attendance or direct employment status for Muslim women. I also find suggestive evidence that post treatment, Muslim women were more likely to report they were job searching and more likely to identify as politically engaged, with stronger impact on political engagement for Muslim female college students. Ultimately, these results understood in the context of low rates of full face veiling amongst German women, suggest that anti-veiling legislation has promise for examining the flow of interaction and influence between religious identity, the economy, and the law.

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1. Introduction

From 2000 to 2004, several countries in Europe including France, Germany, and Spain, passed legislation that banned the wearing of different religious symbols or full face veils: lesiglation that primarily impacted Muslim women. Narrowing the focus to Germany, this legislation continued to progress over the next twelve years. By 2009, eight states in Germany had some form of anti-veiling legislation (applying under a restriction of visible religious symbols) and the issue had been brought to the courts several times, also drawing the attention of different human interest groups, legal foundations, and media outlets. In 2016, Angela Merkel called for a ban of full veiling— meaning the niqab and burqa— "wherever possible" (Kappeler, 2016) and alleged that the practices were not appropriate in Germany. But just how large of a presence does veiling pose, to warrant a response from the German Chancellor? The "new veiling" movement refers to the increase in veiling since the 1970s: a pattern that has persisted in majority Muslim countries and minority Mulsim countries. With this rise in veiling, there has been a rise in public controversy surrounding Muslim women's religious attire (Carvahlo, 2012), particularly in countries that are not majority Muslim.

Within the European Union, this controversy has manifested over time in the form of anti-veiling legislation, which restricts the right to wear the hijab, niqab, or burqa (or more broadly, religious attire in general). Although many of these countries do not necessarily have a high presence of women who wear the veil, the percentage of Muslim residents is increasing over time, perhaps prompting more visibility of the Islamic community overall. Currently eight countries in the European Union have some form of ban on veiling at the local or national level, punishable by varying degrees of fines and civics classes. The most recent discussion of anti-veiling legislation happened in switzerland on March 8, 2021. Swiss voters passed a

referendum that would ban the niqab, burqa, and other full face veilings in public (BBC News Europe, 2021): evidence that this legislation continues to be relevant in shaping the future of economic and social outcomes in Europe. Other parts of the world outside of the EU, such as Canada, are beginning to consider bans as well.

Secularity and the protection of women's rights are both offered as the predominant justification for anti-veiling legislation (Human Rights Watch, 2009). However, there is a lack of empirical evidence supporting these justifications. In general, there is also the question of "the veil" as an economic, religious, and social signal. I believe there is space to contribute to literature on the political economy of religion and the impact of visible religious practices like veiling on economic outcomes, through answering these two questions: How does anti-veiling legislation impact the perception of trust in political institutions and perception of secularity? How does anti-veiling legislation impact labor market outcomes for Muslims in predominantly Christian countries? In order to begin answering these questions, I examine data from Germany to take advantage of state variation in legislation.

2. Veiling as a Social Signal

The practice of veiling itself requires contextualization in order to understand how veiling may impact economic outcomes. Conceptualization of veiling as an economic symbol coincides with the study of the political economy of religion, which developed in the 1990s (Ensminger, 1994). Prior literature on veiling is more sociologically focused, centering on orientalist portrayals (Bijdiguen, 2019) and feminist implications of the veiling practices (Alrasheed, 2013). Alrasheed's argues that western rhetoric around the religious attire of Muslim women has often been delivered through an orientalist and colonial lens of rescue from oppression. Bijdiguen uses

media portrayals of veiling as evidence that colonial ownership of the Middle Eastern region by France resulted in French colonial portrayals of Islamic religious attire as a visual distinction of the difference between East and West: a symbol of othering. Bijdiguen also expands this concept into the modern portrayals of the hijab in French media have "defined the hijab within an antithetical place in relation to the French concepts of gender equality, emancipation and liberation." These representations of veiling focus on veiling as a social distinction between Muslim women and non-Muslim women.

A primary motivation for this thesis is the theoretical model of veiling as an economics and social signal presented in Jean Paul-Carvahlo's 2012 paper "Veiling". Carvahlo identifies veiling as a commitment mechanism, which reduces the wearer's temptation to violate the norms of the religion and acts as a visible signal of their religious commitment. In more diverse environments, the veil can be used to signal religious affiliation, while still allowing the wearer to interact with secular circumstances and individuals— following from this, the highest demand for veiling should be from Muslim women in non majority Muslim environments. With this understanding of veiling, legislative bans on veiling would actually push Muslim women out of secular environments and increase social segregation between religious groups. Similar to Carvahlo, human rights groups and religious organizations have expressed concerns that anti-veiling legislation will harm social integration and create "parallel lives" where Muslim women are isolated in their own religious communities (Grillo and Shah, 2012).

There is a growing body of literature seeking to provide empirical evidence for the impact of anti-veiling bans, examining the impact of bans in public schools (Maurin, 2019) and on secondary educational outcomes and family composition (Abdelgadir and Fouka, 2020). There have also been attempts to assess Muslim women's opinion directly through surveys

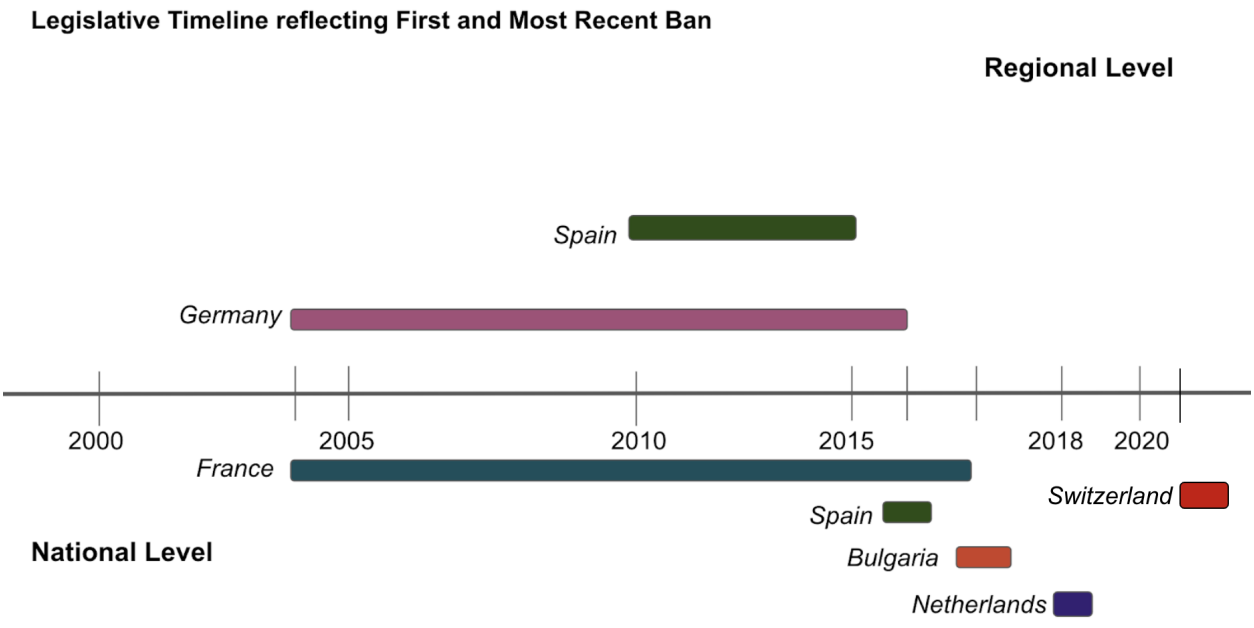
(Zempi, 2019). Maurin's findings suggest that the initial 1994 circular banning hijabs in public schools in France produced a positive effect on educational outcomes for Muslim students, however, the 2004 legislation did not produce the same effect. Interviews collected by Zempi suggest responses to anti-veiling legislation among Muslim women who wear the veil in Denmark has been largely negative, reporting decreased feelings of autonomy and increased feelings of persecution— which is expected, given media record of public protests in response to the legislation's enactment. Abdelgadir and Fourka's 2020 assessment covers the impact of anti-veilings bans on secondary educational outcomes for Muslim women in France and traces those outcomes to their impact on labor market trajectory and family composition. Abdelgadir and Fourka finds that post anti-veiling legislation, educational outcomes are negatively impacted, supporting a theory that anti-veiling legislation harms Muslim students in secular spaces. I hope to contribute to this body of work by providing evidence of the bans' impact on economic outcomes and social perception within individual countries, as well as comparing this impact between countries.

3. Legislative Development

It is also important to understand the development of anti-veiling policies over time. While there have been majority Muslim countries with anti-veiling legislation, such as Turkey, my paper will focus on non-majority Muslim countries and more religiously diverse environments, in order to examine Caravhlo's theory on demand for veiling. France is notable as the first European country to adopt nation wide anti-veiling legislation. National discussion of legislation on veiling began in 1989, when three Muslim middle school girls in Paris were supsended for refusing to remove their hijabs in class. After a month the State Council of France

ruled that the girls' headscarves were compatible with the "laicite" (secularism) of French public schools, but this positive ruling was reversed by a 1994 circular. From 2003 onwards, other countries in the European Union began adopting legislation as well, with six countries adopting legislation between the period of 2010 and 2017. The Canadian province Ontario adopted anti-veiling restrictions in 2019 and the most recent European country to adopt anti-veiling legislation was Switzerland in 2021. Several regions and countries currently have anti-veiling policies under review. It may also be interesting to consider how COVID-19 has changed the public conversation around and perception of bans on niqabs and burqas in public spaces, which exist despite mandatory face-mask requirements for COVID-19.

Figure 1. Abridged timeline and Level of Legislative Bans in EU Countries of Interest



Source: Open Society Foundation's brief on Muslim Women's Dress in the EU.

In general, anti-veiling bans can be though of as applying in two ways. Some bans focus on the regulation of public spaces. These bans typically forbid citizens from wearing the niqab and burqa in public spaces; the punishment is a monetary fine that often increases upon subsequent offense. Other bans focus on regulating the attire of public employees. These bans often prevent public employees from wearing the hijab, niqab, and burqa; employees who do not comply will be terminated from their roles and may face other consequences.

Figure 2. Table reflecting the two categories of legislative bans applied to Different Countries

Country	**Employment Specific Bans**	**Public Space Bans**
France	Ban on visible religious symbols for public employees	Ban on niqab and burqa in public spaces
Italy	None, but law allows for private employers to decide at their discretion.	Face and concealing head coverings banned in public buildings.
Spain	None	Ban on niqab and burqa in public spaces in 9 municipalities. Ban on face coverings during public demonstrations.
Germany	Ban teachers in public schools from wearing certain visible items of religious clothing and symbols in Baden-Württemberg, Bavaria, Berlin, Bremen, Hesse, Lower Saxony, North Rhine-Westphalia, and Saarland. Ban civil servants from wearing the hijab in Hesse and Berlin.	Berlin

Source: Open Society Foundation's brief on Muslim Women's Dress in the EU

3.1 German Legislative Development

In Germany, the Muslim percentage of the population overall has grown overtime, from 3.1% of the population in 1990 to about 5.22% of the population in 2010 and onwards (Kettani, 2010). The first ant-veiling legislation was proposed in Baden-Württemberg in 1998, but the first significant legislation was enacted in 2003 in Berlin. 2003 is also a notable year because several other German federal states such as Hesse began discussion of anti-veiling legislation. Legislation has developed at different levels, from municipal to state level. Ultimately, from 2003 to 2009, eight out of sixteen total states passed bans prohibiting visible religious symbols and full face veiling, applied to different extents and with some of those bans increasing in severity over time (Human Rights Watch, 2009)[1]. Although the legislative bans do not reference Muslim religious symbols specifically, five of those eight states with restrictions on religious symbols have exceptions only for Christian religious symbols, meaning that the restrictions functionally apply to predominantly Muslims.[2] Three German states— Brandenburg, Rhineland-Palatinate, and Schleswig-Holstein—did reject anti-veiling legislation as unconstitutional. In 2015, a case brought to the Federal Constitutional Court made it clear that a national ban was not constitutional. Yet, 2016 marked the first time a national ban on full face veils in public spaces was put forth, although the legislation did not develop in part because of the ruling a year prior. The issue of a national "burqa ban" continued to appear in court cases up to 2018 and has continued to remain a political talking point among both the conservative and left-wing spectrum (Muller, 2018). In 2020, Baden-Wurttemburg voted to ban the burqa in public

[1] Some states such as North Rhine-Westphalia had rudimentary legislation in 2003 that was then amended from 2004 to 2006. For more detailed overview of court cases and amendments, see "Discrimination in the Name of Neutrality: Headscarf Bans for Teachers and Civil Servants in Germany" in references.

[2] There have also been amendments in the case of a few states, which allow for an exception in the case of educational trainees. For example Muslim trainees to be social workers in Hesse are allowed to wear the hijab.

schools for students, adding onto the restrictions already in place for teachers (Hasselbach, 2020).

Despite the lack of specific reference to Islam in the language of the legislation, justification for this legislation has focused specifically on Muslims. When a ban was drafted in North Rhine-Westphalia in 2005, the headscarf was cited as a link to "an inferior position of women in society… [and] a fundamentalist statement for a theocratic political system in contradiction to constitutional values" (Human Rights Watch, 2009, pg 28). In Hesse, the explanation of the ban also explicitly references headscarves and makes the argument that veiling in particular violates political neutrality. Much of media response to this legislation has focused on the potential Islamophobic nature of the justification. The first wave of bans applying to public schools sparked response from both non-Muslim and Muslim public school teachers, as an issue of both feminism and race. Public protests by female teachers in Hesse called for the bans to be struck down, but no legislative change was made. Some feel that discussion of the ban is unnecessary and even Islamaphobic, due to the low percentage of Muslim women who actually wear the niqab and burqa in Germany (Taylor, 2019). Analyzing Google Trends data for search terms "hijab" and "Muslim ban" suggests that that popularity of these search terms peaked from late 2009 to mid 2010 and in late 2016 (Google Trends), which aligns with saturation of legislation and proposed legislation on the state and national level.

Figure 3. 2009 Geographic Regions in Germany with Application of Anti-Veiling Legislation

Base Image Source: Wikimedia.org

Figure 4. Levels of Anti-veiling Legislation in German Federal States

German Federal State	**Scope of Anti-Veiling Legislation**
Berlin	No visible religious symbols for all public employees including police officers, judges, teachers, etc.
Hesse	No visible religious symbols for all public school teachers and civil servants. **Has exception for Christian symbols*
Baden-Wurttemburg	No visible religious symbols for all public school teachers and officials. No full face veils for public school students **Has exception for Christian symbols*
Bavaria	No visible religious symbols for all public school teachers and civil servants. **Has exception for Christian symbols*
North Rhine-Westphalia	No visible religious symbols for all public school teachers and civil servants. **Has exception for Christian symbols*
Saarland	No visible religious symbols for all public school teachers and civil servants. **Has exception for Christian symbols*
Bremen	No visible religious symbols for public school teachers.
Lower Saxony	No visible religious symbols for public school teachers.

Sourced from "Discrimination in the Name of Neutrality: Headscarf Bans for Teachers and Civil Servants in Germany" and "Restrictions on Muslim Women's Veiling in 28 EU Member Countries"

4. Methodology

Due to both the regional nature of certain anti-veiling legislation and the fact that the primary consequences of the policy (fines and classes) apply to Muslim women, there is the potential to apply a quasi-experimental design: the difference-in-difference (DID) with time fixed effects approach. Using DID estimation requires satisfaction of three main assumptions—

exchangeability, positivity, and the Stable Unit Treatment Value Assumption— the most critical of which is the assumption of parallel trends between the control and treatment group.

Because anti-veiling legislation predominantly applies to Muslim women and is only enacted in certain regions, one would expect that anti-veiling legislation would impact labor market outcomes for Muslim women, especially in regions with legislation related to public employment roles. Following Carvahlo's model, anti-veiling legislation should cause demand for veiling to increase; it would also push Muslim women to stay in pre-dominantly Muslim spaces (if accessible) or private spaces where they could still participated in veiling, which identity theory would suggest leads to less integration with secular society. There are, however, endogeneity concerns centered around location of residents and enactment of legislation. One would expect that residents would not move to an area where they were impacted by discriminatory legislation. It seems more probable that a higher percentage of Muslim residents or higher visibility of residents who veil would prompt discussion around veiling and enactment of anti-veiling legislation. Since 2001, this question is also complicated by general rise in Islamophobia, often in conjunction with fear of and response to terrorist attacks (Bijdiguen, 2019).

Even among non-Muslim respondents, anti-veiling legislation could produce an impact on view of government, views of public sector work, or views of other religious groups. There is evidence that laws effect belief systems in general in the United States (Wheaton, 2020) which we may believe is similar to EU countries as it is another Western, democratic country. Anti-veiling legislation could also be viewed as a measure of political tolerance. Based on the members of Parliament and respective governments most vocal in support for legislation, or proposing legislation, we can conclude that anti-veiling legislation is largely associated with

political conservatism (Open Societies Foundation 2018). Previous literature has associated racial inclusivity with positive effects on growth (Berggren, 2010). In European Countries where Muslims are a minority, anti-veiling legislation could impact economic growth through effect on political tolerance and perception of political tolerance, instead of through labor market outcomes directly.

This analysis assumes that media coverage is that primary method by which residents of a country learn about legislative changes such as anti-veiling legislation. Rationally, learning of the negative consequence of legal punishment and restriction on religious expression from anti-veiling legislation and seeing negative media coverage of one's identity overall would have a similar impact on feelings of social acceptance. Beyond the direct impact of anti-veiling legislation, there may be some spillover effect from legislation prompted media coverage of Islam on treated respondents. This paper holds that the media coverage is prompted by the legislation, however, so there is no need to isolate between the two effects. Instead, media coverage of anti-veiling legislation helps to provide stronger justification for the Post term.

To study the potential impact of anti-veiling legislation in European Union Countries using a DID approach, the ideal data set would include pretreatment and post-treatment data on respondent region, religious identification, employment status and sector, and measures that could approximate social perception. Employment sector information is particularly important for countries with have anti-veiling legislation applying to public sector jobs, as referenced above, because legislation may push workers to leave the public sector but enter similar jobs within the private sector. There are limitations in that it can be difficult to obtain European datasets with high Muslim sample size and direct regional and religious identification, due in

part to data privacy restrictions. Due to these limitations, I will primarily work with data from Germany, discussed more specifically in the following section on data sources.

My difference in differences approach uses staggered treatment of anti-veiling laws. The basic regression is reflected below.

$$1.\ y_{outcome} = \beta_1 Treated + \beta_2 Post + \beta_3 Treated\ x\ Post + \beta_4$$

For further specificity, I also include time fixed effects. Using the difference-in-difference with fixed effects approach, allows us to resolve omitted variable bias, without dropping observations. Treatment is defined in two different ways. Treatment is defined by time and region for regions within one country. The basic regression is shown below.

$$2.\ y_{outcome} = \beta_1 Treated + \beta_2 Post + \beta_3 Treated\ x\ Post + fixed\ effects + \beta_4$$

Treated is defined as residing in a region with anti-veiling legislation. Post is defined as the date when anti-veiling legislation was enacted (or some proxy measure for maximum saturation of anti-veiling legislation within a region). Treated * Post is defined as residing in a region where anti-veiling legislation was passed, after the date it was passed. Fixed Effects represents time fixed effects and Post is dropped, due to colinearity. This base regression can also be further specified to explore heterogeneity in response variables, as shown below. A covariate could be a binary variable such as gender or a scalar variable such as income.

$$3.\ y_{outcome} = \beta_1 Treated + \beta_2 Treated\ x\ Post + \beta_3 covariate +$$

$$\beta_4 Covariate\ x\ Treated + \beta_5 Covariate\ x\ Treated\ x\ Post + fixed\ effects + \beta_6$$

However, I chose instead to explore heterogeneity by manually subsetting the data to reflect respondents with features of interest.[3] Studying anti-veiling legislation offers interesting

[3] Regression 3 is included as an example to outline future possibility for larger datasets, where manually subsetting by the population groups associated with the covariate may not be as possible. My results using this regression to specify for education were not as significant as those produced by just subsetting.

potential for subgroups based on gender, religious belief, education, and even measures of time spent in public spaces. These subgroups enable the exploration of comparative effects of Treated and Treated x Post across different parts of the population.

5. Data Sources

My primary data source is the German Socio-Economic Panel (SOEP): a census like survey that has been conducted yearly from 1981 to present day, surveying approximately 11,000 households across Germany. SOEP data is useful for a difference and difference approach because the dataset includes rich regional and employment data, religious identification, and responses on a range of social issues. Although the majority of focus is on treatment as defined by state level regions, SOEP data also leaves the possibility to adjust treatment definitions to specific cities or even neighborhoods, perhaps in conjunction with recorded media coverage of anti-veiling legislation. In general, the data also has a Muslim female sample size that aligns with the percent of the population that is Muslim and has a cell size large enough for analysis: 527 Muslim women from East Germany and 4,540 Muslim women from West Germany (weighted in regressions by longitudinal survey weight). The data has been reshaped into longitudinal panel data, sorted by unique person ID.

Because religious identification and religiosity is a key variable for this analysis, I have focused on years with respondent data on these two variables, leaving ten waves total: 1990, 1997, 2003, 2007, 2011, 2013, and 2015 through 2018. These waves offer an adequate timeline to assess legislation, as the bulk of legislation was passed during 2009, meaning there is data from nineteen years before the legislation was passed and almost ten years after. One limitation of my dataset is that in 2017 and 2018, religious identification questions were only included on

10% and 1% of the survey questionnaire versions respectively, as compared to an average of about 17% of questionnaires in previous years. This reduction in frequency of question also led to a reduction in Muslim sample size that reduces the power of observations following 2016 (despite accounting for the difference with weighting). 2016 is also a notable year as this was the first time a national anti-veiling law was proposed in German. To avoid capturing any spillover effect of media overage in 2016, I have dropped that year from the analysis. Due to this reason, the bulk of my paper focuses on the treatment year of 2009 and only includes data from 1990 through 2015.[4] Difference in difference estimation as a whole is better at estimating short term effects. Analysis including waves up until 2015 still covers six years after the treatment year, which should be adequate to capture a treatment effect.

Another limitation of my current version of the SOEP data set is that due to location restriction on use outside of Germany, at present time I was unable to obtain access to state and city level regional data. This dataset contains only East Germany and West Germany level federal state identification. However, because seven of the eight states with anti-veiling legislation are located in West Germany (lower-Saxony is the only East German state with anti-veiling legislation) and all states had some form of legislation by 2009— recognized by national media coverage and national government entities— the current SOEP data set still allows for a broader regional difference in differences definition, using 2009 as a proxy year.

In order to assess the impact with more granular state level identification, I also have a secondary data source: the International Social Survey Programme's (ISSP) Religion Survey. The ISSP is a cross national program that conducts surveys on different topics in the social sciences and ensures all data collected is publicly available. The ISSP Religion survey is

[4] See Appendix A1 - A4 for graphs of outcomes including data up until 2018, included for the purpose of providing potential context around 2016 as a notable or treatment year.

available in multiple waves— 1991, 1998, 2008, and 2018— though sample size and country participation vary by individual wave. On average, the number of respondents per wave from Germany is about 2000 respondents. The Religion survey covers a range of questions on trust in government institutions, perception of particular religious ideas and religious groups, and demographic information on participants such as marital status and income. The ISSP dataset is not the main focus of this study, however, due to the small sample size of Muslim respondents. Prior to 2008, Muslims are not directly identified and in order to capture a treatment effect, respondents identifying as religious but Non-Christian have been used as a proxy for Muslim respondents. Although there are weighting factors, the sample size is so small that results should be taken more as descriptive results than predictive indicators.

Figure 5. Cell Size for ISSP Muslim Respondents

Country	**Approx. Muslim Pop 2009**	**ISSP 1991**	**ISSP 1998**	**ISSP 2008**	**ISSP 2018**
Germany	5%	11 Non-christian (out of 2832)	23 Non-christian (out of 2006)	48 Muslim (out of 1706)	56 Muslim (out of 1724)

6. SOEP Structure and Results

Figure 6. Table of Independent Variables

Variable	**Definition**
Federal region	Respondent location: East Germany or West Germany
Sex	Respondent sex
Muslim	Respondent identifies as ever having been Muslim
In College	Whether respondent is in college
Religious	Attends church/ religious events at least weekly
Time Fixed	Aggregate sum of time fixed effects across dummy years

Figure 7. Table of Outcome Variables

Variable	**Definition**
Employment	Respondent identifies as employed
Unemployment	Respondent identifies as unemployed
Public	Respondent identifies as civil servant
Quit Job	Whether respondent quit job in past year
Job searching	Whether respondent identifies as looking for employment
College Graduate	Whether respondent has graduated from college
Income	Respondent Income
Church Attendance	Ranking of church attendance from 1 to 10
Is Political	Ranking level of political interest

The primary assumption that the difference in differences model should satisfy is the parallel assumptions trend. Region is defined as West Germany (which again, contains 7 of the 8 states with anti-veiling legislation). The year serving as cutoff between treated and treated post is 2009. Although some states has legislation prior to then, all eight states had legislation in its strictest iteration by 2009. Assessing from the time window of 2004 to 2011, Google search of the terms “hijab ban” and “burqa” also peaked from the period of late 2009 to early 2010, further supporting that 2009 was a notable or high visibility year for anti-veiling legislation.

Figure 8. Muslim Women’s Employment Treated vs Control

Figure 9.Muslim Women's Unemployment Treated vs Control

Figure 10. Muslim Women's Public Employment Treated vs Control

Figure 11. Muslim Women's Monthly Attendance of Religious Events Treated vs Control

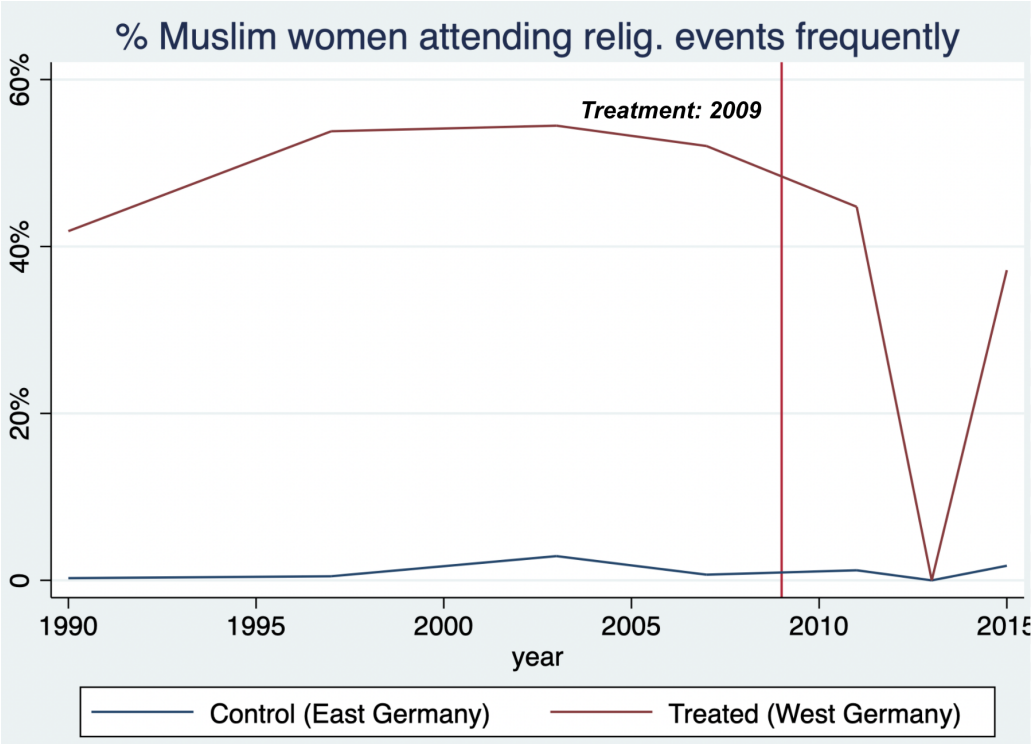
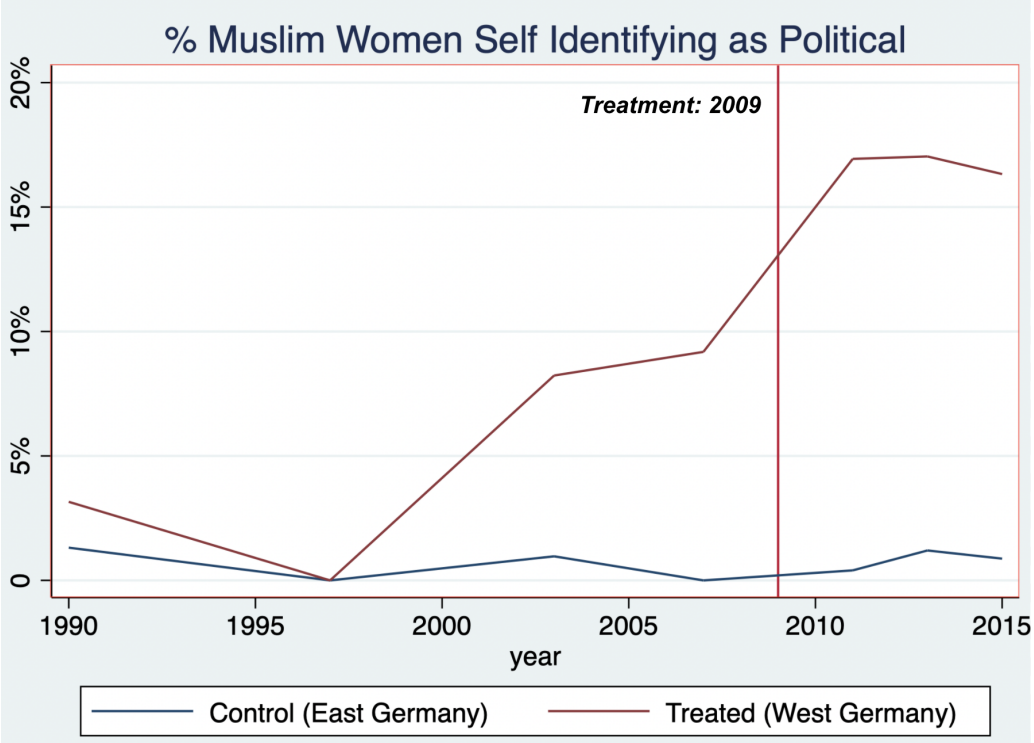


Figure 12. Muslim Women Political Identification Treated vs Control



As we can see from the graphs above, prior to treatment the progression of employment and unemployment overall is fairly similar for Muslim women both East and West Germany. Public employment trends are more erratic (most likely due to small sample of Muslim women who are public servants), but appear parallel from 2005 onwards. Percent of Muslim women identifying as political also appears parallel from 1997 onwards; there is arguably a slight divergence in 2007, but this could be attributed to the survey wave years (which occur at 2007 and 2011). Examining the measure of weekly or daily church attendance also provides support for the parallel trends assumption up until 2009. It should be noted that church attendance is a more rare measure in the survey: within specific waves (years) of the survey, different versions of the questionnaire did not include questions on church attendance, so those responses have been dropped in related regressions. Despite the weighting factors, more emphasis should be placed on religious event attendance coefficients as descriptive than predictive results. Average percent ranking self as political also converges in 1997 (which could suggest a sampling issue), but appear parallel pre 2009.

Figure 13. Employment Outcomes Muslim Women: Regression Results

	Employment b/se	Public Employ. b/se	Unemploy. b/se	Job hunting b/se	Income b/se
West German	0.026	0.025	-0.054	-0.146**	125.795
	(0.06)	(0.02)	(0.06)	(0.05)	(87.35)
Post 2009	-0.202***	-0.004	0.213***	-0.037	-148.138
	(0.06)	(0.02)	(0.06)	(0.06)	(87.33)
West German x Post	0.042	-0.007	-0.053	0.127**	-26.901
	(0.06)	(0.02)	(0.06)	(0.02)	(90.82)
R-sqr	0.047	0.002	0.040	0.001	0.018
N	5083	5083	5083	5083	5083
BIC	3916.9	-3233.1	5457.0	4323.0	80494.8
Including Time Fixed Effects					
West German	0.042	0.017	-0.057	-0.085	12.190
	(0.06)	(0.02)	(0.06)	(0.05)	(79.93)
West German x Post	-0.035	-0.016	0.040	0.078*	-15.262
	(0.06)	(0.02)	(0.06)	(0.005)	(83.60)
R-sqr	0.120	0.033	0.157	0.616	0.108
N	5083	5083	5083	5083	5083
BIC	3584.9	-3323.6	4864.8	-332.5	80073.9

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

Here, West German is defined as residence in West Germany and is the treatment variable. These regressions are run without time fixed effects to show the effect of the Post term (defined as post 2009). These coefficients reflect that for Muslim women respondents, there is no signicifant difference in employment status between the treatment and control region. Post 2009, employment did decrease slightly at a statistically significant level, but this was not unique to the control region. The coefficient for job hunting does suggest a statistically significant treatment impact. Muslim women living in West Germany were less likely overall to be looking for work, but post treatment were more likely to be searching for work. Although these results do not directly imply that Muslim women receiving the anti-veiling legislation treatment are being

pushed out of the workforce, the fact that respondents are more likely to job hunt post treatment suggests that anti-veiling legislation could cause respondents to feel more unwelcome in the workplace or that regions which pass anti-veiling legislation have workplaces which are more hostile to Muslim women. Increased job hunting would also be expected if veiling was a commitment mechanism that pushed women out of secular spaces and thus caused labor force friction.

With time fixed effects added in, the Post coefficient is dropped due to colinearity, so it is not included in the regression results above. Coefficients are fairly similar, except for the coefficient of unemployment which has the opposite sign and implies that within the sample, likelihood of unemployment went up for Muslim women. The coefficient on likelihood of job search is similar in sign, but of smaller magnitude and reduced statistical significance.

Figure 14. Religious and Social Outcomes Muslim Women: Regression Results

	Church attend. b/se	Visit Neighbors b/se	Is political b/se
West German	0.068	-0.346	-0.099*
	(0.05)	(0.19)	(0.05)
Post 2009	-0.204***	-6.139***	-0.067
	(0.05)	(0.27)	(0.05)
West German x Post	-0.026	1.331***	0.127**
	(0.05)	(0.29)	(0.05)
R-sqr	0.111	0.271	0.009
N	5083	2460	5083
BIC	2333.3	12330.8	1788.7
Including Time Fixed Effects			
West German	0.059	-0.346	-0.104*
	(0.05)	(0.19)	(0.05)
West German x Post	-0.052	0.302	0.101*
	(0.05)	(0.20)	(0.05)
R-sqr	0.151	0.941	0.040
N	5083	2460	5083
BIC	2165.9	6156.2	1693.8

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

These regression results reflect that the only significant change in church attendance was a decreased likelihood of regular church attendance post 2009— the lack of statistical significance does not negate the theory that anti-veiling legislation may increase religiosity, but more likely reflects the erratic nature of the measure as shown in Figure 13. Regarding social outcomes, results are more significant: Muslim women in the treated region are more likely to visit their neighbors post 2009 and more likely to identify as being interested in politics. Given that most Muslim women in Germany live in communities with people of the same religion (Grillo and Shah, 2012), the fact that respondents are more likely to visit their neighbors post treatment supports the "parallel lives" theory that anti-veiling legislation may cause Muslim

women to segregate to their own communities. The increased likelihood of interest in politics post treatment provides support that anti-veiling legislation— or at least media coverage and discussion of legislation— has an impact on beliefs. The coefficient of West x Post for regressions with fixed effects is similar to that of the regressions without fixed effects. The signs of the coefficients remain the same across outcomes, but magnitude and statistical significance decrease for likelihood of visiting neighbors and political interest identification.

Figure 15. Religious and Social Outcomes:Muslim Female College Students

	Church attend. b/se	Visit Neighbors b/se	Is political b/se
West German	0.256***	1.000	-0.744***
	(0.07)	(0.72)	(0.07)
Post 2009	0.286	-2.000	-0.429*
	(0.17)	(1.15)	(0.19)
West German x Post	-0.365	-2.990*	0.616**
	(0.19)	(1.40)	(0.21)
R-sqr	0.010	0.072	0.038
N	171	105	171
BIC	190.0	556.0	251.2

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

College students are of interest because anti-veiling legislation was more severely applied to public universities in Germany, so students on campus should experience a greater degree of treatment. Isolating the sample specifically to Muslim female college students (dropping time fixed effects due to collinearity within this sample), the post-treatment impact on likelihood of political interest remains positive and applies to a greater degree. The sign of impact of West x Post on likelihood of visiting neighbors is opposite. Muslim female college students in West Germany are less likely to visit their neighbors post treatment. This potential change is

interesting to consider especially if one believes that college students may be exposed to more diverse neighborhoods and environments. However it could also reflect that university students have less available leisure time. The difference in sign of impact between subgroups— adults in general and college students—- suggests that there is room for veiling research specific to the response of Muslim college students. If social contact in more integrated communities is less likely post treatment, while social contact in more insular religious communities is more likely post treatment, this would further support a model of veiling as a commitment mechanism.

7. ISSP Structure & Results

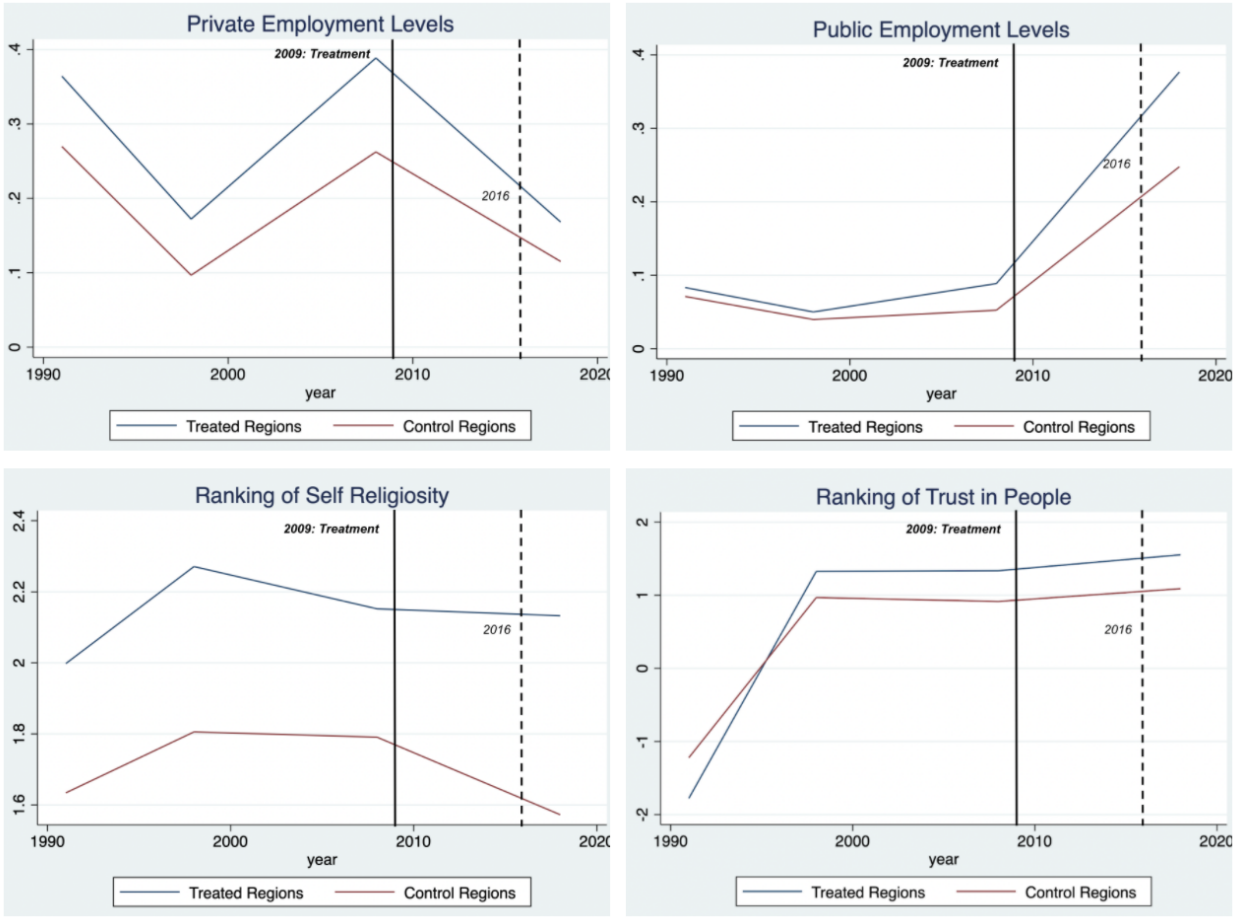
Figure 16. Table of independent and dependent variables.

Variables	**Definition**
Muslim	Self identified as Muslim
Treated	In region with anti-veiling legislation on date after legislation was passed
Fixed Effects	Time fixed effects for each year survey was taken
Public	Currently employed in public sector
Private	Currently employed in private sector
Unemployed	Not employed in any form
Confidence Gov	Confidence in government on scale of 1-6
Trust People	Trust in people in general on scale of 1-6

Using the ISSP survey data, my initial analysis focuses on the German states present within the sample with anti-veiling legislation, with treatment staggered by time the legislation was first enacted. My regions defined as receiving treatment are: Bavaria, Hesse, the Saarland, North Rhine-Westphalia, Baden-Württemberg, and Berlin. Spain. Treated is defined as Treated =

1 for any respondent on a date passed the date when legislation was first enacted. Post has been manually coded so the Post year accurately matches with the yeer of enactment in the specific state. My results center around two main areas: employment and religiosity, but with greater focus on religiosity as that is the dominant topic of the survey. For employment, changes in public employment, alone are not necessarily the ideal outcome, as they could reflect people moving into or leaving the labor market and moving into or leaving the private sector. As a result, private employment and unemployment have been included to provide additional context.

Figure 17. Outcome Variables Across Time: Treated Regions vs Control Regions



The above graphs reflect the progression of outcomes of interest over time for all respondents within the treatment region. Although the dates within Post actually reflect a range from 2004 to 2009, 2009 has been reflected as the treatment year. Prior to 2009, private employment levels, public employment levels, and ranking of trust in people run parallel. Ranking of self-religiosity reflects a very slight change at 2007, prior to 2009, but this could be due to the fact that 2007 was a sample year or the fact that three treatment regions (Hesse, Berlin, North Rhine-Westphalia) go into effect prior to 2007. Comparing outcomes specifically for Muslims within the treated region and non-treated regions would be ideal, but for analysis of the sample size within this data set, comparing respondents overall can more accurately reflect outcomes within treated regions. Comparing across respondents of all religions still provides adequate evidence that outcomes of interest were experiencing parallel trends prior to treatment.

Figure 18. Employment Outcomes: Muslim Respondents in Germany with Time Fixed Effects

	Unemployed b/se	Public Employed b/se	Privately Employed b/se
Treated	-0.081	-0.061	0.112
	(0.10)	(0.08)	(0.12)
Treated x Post	0.116	0.080	-0.159
	(0.15)	(0.17)	(0.17)
R-sqr	0.011	0.314	0.242
dfres	127	127	127
BIC	148.3	141.4	176.4

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

Regression results for employment outcomes are not statistically significant. Taken as descriptive results, they suggest that within the ISSP sample unemployment went up for Muslim respondents in treated region post legislation enactment, but public employment also increased

slightly whereas private employment decreased. Given that the ISSP Religion survey focuses on questions related to religious beliefs, this may also impact answers to questions not related to religion. In some sense the ISSP dataset has unique benefit though, as it prioritizes religious information and still includes employment information, whereas the majority of employment surveys of European countries do not include religious identification due to data privacy laws.

Figure 19. Religiosity Outcomes: Muslim Respondents in Germany with Time Fixed Effects

	Religiosity b/se	Confidence in Gov. b/se	Confidence in Bus. b/se	Trust People b/se
Treated	-0.789***	-0.013	0.070	-0.083
	(0.12)	(0.12)	(0.13)	(0.06)
Treated x Post	0.320*	-0.218	-0.217	-0.079
	(0.15)	(0.13)	(0.14)	(0.09)
R-sqr	0.018	0.046	0.063	0.711
dfres	6005	6005	6005	5140
BIC	29201.3	28395.2	29040.0	19272.2

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

These coefficients suggest that within the ISSP sample, the likelihood of ranking oneself as religious or ranking religion as important to oneself increased post treatment for Muslim respondents, but not to a high degree of stastical significance. The other coefficients do not suggest treatment had a significant effect on confidence in government and business nor trust in people for Muslim respondents. The increase in religiosity may be notable, given the decrease in likelihood of high religiosity for Muslims overall post 2009 and the more significant decrease in likelihood of high religiosity for Muslims living in the treated region. If the increase is due to restrictions on veiling, however, one would expect to see that there is a greater effect for Muslim

women. A two sample t-test between men and women does not suggest a difference in effect between the two, but this is likely due to the very small cell size of Muslim women. Altogether, this analysis of religiosity outcomes post treatment suggests that future research on data with similar geographic identification but larger sample size could find productive results in focusing on religiosity of Muslims in German regions with anti-veiling legislation.

8. Conclusion

In considering media response to the development of anti-veiling legislation, I touched on three groups of rhetoric: the conservative theory that anti-veiling legislation promotes secularity and rescues women from inappropriate veiling, the liberal theory that anti-veiling legislation is anti-feminist, and a more neutral third take that suggests there are not enough women who wear the niqbab or burqa for the legislation to be relevant. Empirical evidence from the German Socio-Economic Panel and the ISSP Religion Survey indicate that the impact of anti-veiling legislation in Germany may lay somewhere between the liberal and neutral take. Anti-veiling legislation did not appear to have a significant impact on direct employment, public employment status, or church attendance. Following the treatment of anti-veiling legislation, however, Muslim women in treated regions were more likely to identify as job hunting and more likely to visit their neighbors. Returning to the broader theory of veiling as a commitment mechanism, employment results are thus inconclusive. Although there was no significant impact on church attendance within the SOEP dataset, ISSP results suggest that religiosity may have increased slightly for Muslims in treated regions in Germany. Legislation also did appear to have some impact on political identification. Muslim women were more likely to identify as interested in politics post treatment, with the impact even greater for Muslim college students. The slight

increase in likelihood of religiosity and the increase in job hunting could provide support for veiling as a commitment mechanism. The increase in political response and changes in engagement with neighbors also suggest that veiling could be a commitment mechanism, but are less conclusive.

For respondents overall, regardless of education status, these results do not sum to a story of improved employment outcomes or even increased secularity. Placing individual country results in the context of the larger body of literature on anti-veiling legislation discussed earlier draws a natural comparison between the effects in Germany and in France. Across both countries, legislation has not been shown to help Muslim women enter the workforce, improve secularity in schools, or improve secularity overall. This is important for the development of future legislation applying to religious symbols and Muslim women, as countries like Switzerland are on the path to follow in the footsteps of Germany and France. Whether anti-veiling legislation has a unique impact due to the workings of veiling or communicates general intolerance, it serves as a law that generates fairly heated political and media coverage. As a small lever between what some might consider sacred beliefs and the mundane economic spaces of daily employment, anti-veiling legislation should be carefully assessed to ensure that it achieves a positive economic or identity impact relative to the legislative and media space it occupies.

9. Limitations & Future Research

The primary data limitations were lack of more granular German state data and small Muslim sample size. Future research using German state identification could compare outcomes between treated and untreated states in West Germany for even more accurate difference in

differences model. More comprehensive census style data also might allow for analysis focusing specifically on public school teachers, which would align most directly with current German case law on anti-veiling legislation. There is also potential for cross country assessment, to take advantage of variation in level of anti-veiling legislation between countries and regions.

Appendix.

Figure A1. Muslim Women's Employment Treatment vs Control

Figure A2. Muslim Women's Unemployment Treatment vs Control

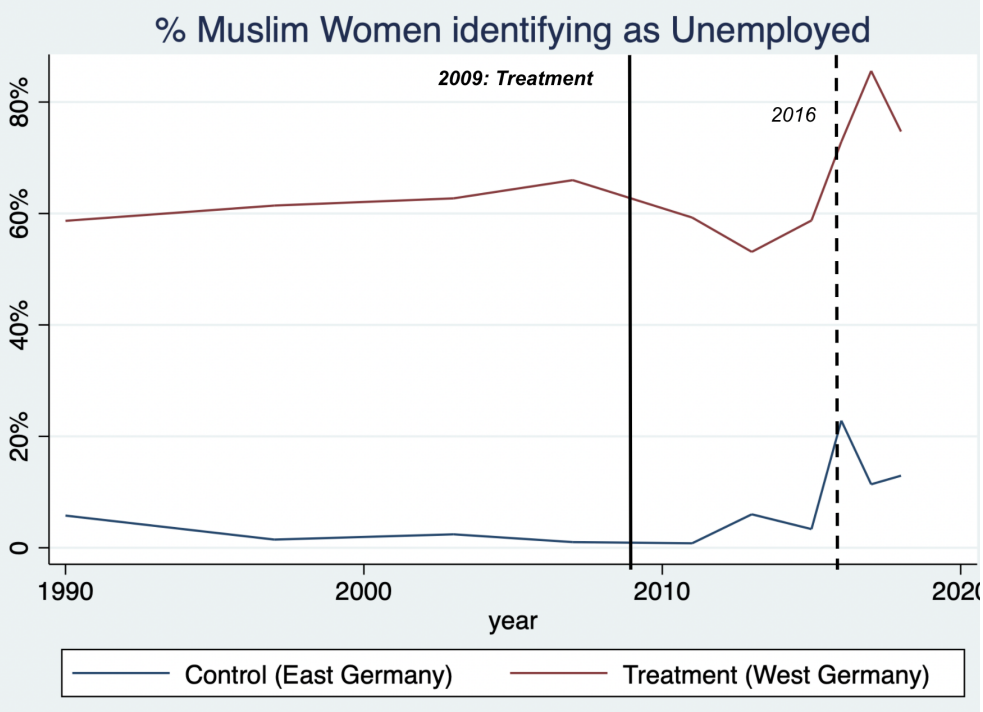
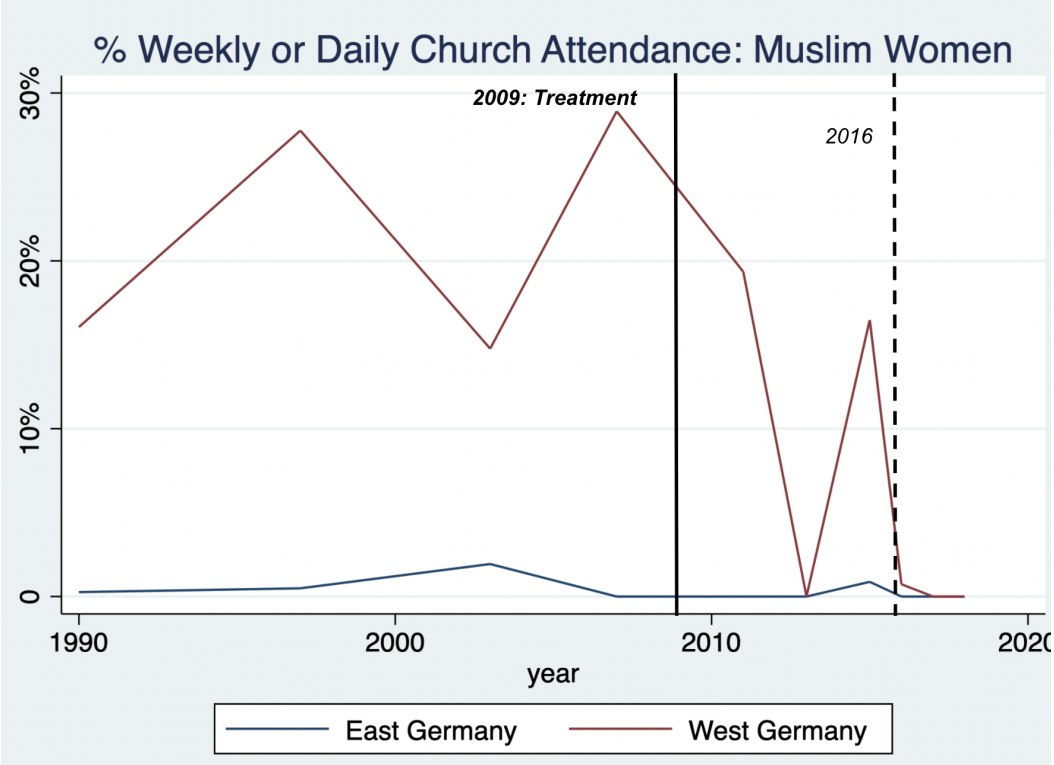


Figure A3. Muslim Women's Public Employment Treatment vs Control

Figure A4. Muslim Women's Religious Attendance Treatment vs Control



Data up until 2018 has been included in the graphs of outcome across time as the data is weighted and could provide context for understanding other potential treatment years. As mentioned, 2016 was the first year national anti-veiling legislation was proposed in Germany, so we would expect outcomes to diverge then. In general, however, we see anomalous trends across the graphs beginning after 2015. This does not support the use of 2016 as a treatment year. It could reflect that the endogeneity concerns previously mentioned: that conditions leading up to legislation have more of an impact than legislation, but more likely is due to a change in sampling and the decrease in Muslim sample size beginning in 2017. Exploration focusing on more recent years from 2015 to present may want to consider larger political changes.

References

Alrasheed, G. (2013). The Face Veil Through the Gaze. *CADAAD, 1*. Retrieved from https://www.lancaster.ac.uk/fass/journals/cadaad/wp-content/uploads/2015/04/Volume-7_Alrasheed.pdf

Berggren, Niclas, and Mikael Elinder. "Is Tolerance Good or Bad for Growth?" *SSRN Electronic Journal*, 2010, doi:10.2139/ssrn.1695931.

Bijdiguen, L. (n.d.). Colonial and Orientalist Veils: Associations of Islamic Female Dress in the French and Moroccan Press and Politics. Retrieved from https://research.gold.ac.uk/14844/1/MED_thesis_BijdiguenL_2015.pdf

Burqa bans, headscarves and veils: A timeline of legislation in the west. (2018, May 31). Retrieved October 01, 2020, from https://www.theguardian.com/world/2017/mar/14/headscarves-and-muslim-veil-ban-debate-timeline

Carvalho, J. (2012). Veiling*. *The Quarterly Journal of Economics, 128*(1), 337-370. doi:10.1093/qje/qjs045

Diallo, R. (2018, April 04). Hijab: A very French obsession. Retrieved October 01, 2020, from https://www.aljazeera.com/opinions/2018/4/4/hijab-a-very-french-obsession/

d1eeb6ad5fd7. "EU-MIDIS II: Second European Union Minorities and Discrimination Survey - Knowledge for Policy Commission." *Knowledge for Policy - European Commission*, 3 Oct. 2018, ec.europa.eu/knowledge4policy/dataset/ds00141_en.

Ensminger, J. (1994). The Political Economy of Religion: An Economic Anthropologist's Perspective. *Journal of Institutional and Theoretical Economics (JITE) / Zeitschrift Für Die Gesamte Staatswissenschaft, 150*(4), 745-754. Retrieved December 6, 2020, from http://www.jstor.org/stable/40751763

"Germany-Discrimination-in-the-Name-of-Neutrality-Headscarf-Bans-for-Teachers-and-Civil-Servants-in-Germany-Feb-2009-68pp." *Human Rights Documents Online*, doi:10.1163/2210-7975_hrd-2156-0582.

"Germany's Bavaria to Ban Full-Face Veil." *BBC News*, BBC, 22 Feb. 2017, www.bbc.com/news/world-europe-39050718.

Gjocaj25/07/2017, S., Jones, B., & Insight, B. (2017, October 16). Another layer of the social fabric: Kosovo's hijabi women. Retrieved October 01, 2020, from https://prishtinainsight.com/social-fabric-mag/

Google Trends, Google, trends.google.com/trends/?geo=US.

Grillo, Ralph, and Prakash Shah. "Reasons to Ban? The Anti-Burqa Movement in Western Europe ." *Max Planck Institute for the Study of Religious and Ethnic Diversity* , May 2012, doi:ISSN 2192-2357 .

Hasselbach, Christoph. "German Authorities, Politicians Divided on Niqab, Burqa Ban: DW: 08.02.2020." *DW.COM*, 2 Aug. 2020, www.dw.com/en/german-authorities-politicians-divided-on-niqab-burqa-ban/a-52297543.

ISSP Research Group (2019). International Social Survey Program: Religion I-III - ISSP 1991-1998-2008. *GESIS data archive, Cologne. ZA5070 data file version 1.1.0, https://doi.org/10.4232/1.13171.*

Kettani, Houssain. "Muslim Population in Europe: 1950 – 2020." *International Journal of Environmental Science and Development*, 2010, pp. 154–164., doi:10.7763/ijesd.2010.v1.29.

Michael, Postman. "Blank Map of Germany." Wikimedia.org, https://commons.wikimedia.org/wiki/File:Blank_Map_Germany_States.png#metadata

Muller, Marco. "Full-Face Veil Ban: How Laws Differ across Europe." *DW.COM*, 6 Jan. 2018, www.dw.com/en/full-face-veil-ban-how-laws-differ-across-europe/a-44049185.

Open Society Foundations, 2018, pp. 1–102, *Restrictions on Muslim Women's Dress in the 28 EU Member States: Current Law, Recent Legal Developments, and the State of Play* .

"Switzerland Referendum: Voters Support Ban on Face Coverings in Public." *BBC News*, BBC, 7 Mar. 2021, www.bbc.com/news/world-europe-56314173.

Taylor, Adam. "Analysis | Germany's Potential Burqa Ban Has a Problem: Where Are the Burqas?" *The Washington Post*, WP Company, 18 Apr. 2019, www.washingtonpost.com/news/worldviews/wp/2016/08/19/germanys-potential-burqa-ban-has-a-problem-where-are-the-burqas/.

Themes-Team, TYPO3. *About ISSP*, www.issp.org/about-issp/.

Wheaton, Brian. "Laws, Beliefs, and Backlash," Working Paper.