Thesis Economic Policy

Labour Market Discrimination across Religions

A Comparative Economic Analysis on the Relationship between Religiosity and Labour Market Outcomes for Different Majority and Minority Religions in the European Union

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Content

1. Introduction

In Europe, discrimination in labour markets still plays a major role. Studies usually divide discrimination into different categories such as race, ethnicity, gender, age, and religion. Academic studies in the European Union tend to focus on race and ethnicity (ENAR, 2017). Although the study of discrimination based on ethnicity is important, the effect of religious discrimination should not be underestimated. In Greece, for example, jobseekers who are Pentecostal, evangelical, or a Jehovah's Witness face significantly lower occupation access opportunities and receive lower entry wage offers than those who are Greek-Orthodox (Drydakis, 2010). In Ireland, youth unemployment rates are still higher for Protestants than for Catholics. In nearly all of the European Union, at least one in three Muslim respondents indicate that they suffer from discrimination when looking for a job (EU-MIDIS, 2017). Increased religious diversity and religious expression in the workforce, and the unique characteristics of religion, all contribute to the rise of religious discrimination. These trends highlight a need for employers to understand and address religious discrimination issues in the workplace. Still, there is a lack of empirical research in this area, which points to a critical gap in our understanding of religious discrimination (Ghumman, 2013).

According to the EU guidelines on the promotion and protection of freedom of religion or belief, the EU will condemn and take appropriate action against all forms of intolerance and discrimination against persons because of their religion or belief as contrary to the right to equality and non-discrimination in the enjoyment of human rights (Council of Europe, 2013). In order to take this appropriate action, it is important to investigate the relation between labour market outcomes and adhering to a certain religion. Most studies that investigate this relation use the correspondence method. Correspondence studies rely on fictitious applicants. In response to a job or rental advertisement, the researcher sends pairs of résumés or letters of interest, one of which is assigned the perceived minority trait. Discrimination is estimated by comparing the outcomes for the fictitious applicants with and without the perceived minority trait. The most common way to manipulate the perceived minority trait has been through the names of the applicants. Outcomes studied in correspondence studies have been mainly limited to measuring call-backs by employers in response to the fictitious application (Bertrand & Duflo, 2017).

Although these correspondence studies make a valuable contribution to the debate, most often they focus on a single minority group in a single country. This is because they require a lot of time and resources. Therefore, they fail to provide a comparative analysis between different religious groups. There is not one single and uniform religious situation in Europe.

There are multiple, remarkably diverse, and ambiguous religious situations and trends throughout Europe. Northern Europe is mostly Protestant, Southern Europe Catholic and Eastern Europe Orthodox. Furthermore, while countries like the Czech Republic are in large parts non-religious, Ireland and Poland are the most religious countries of Europe with rates comparable to those of the United States (Casanova, 2009). These differences might influence the intensity of the discrimination of certain religious groups. If there is religious discrimination present, a Muslim might be more discriminated in a country with a large Catholic population, such as Spain, than in a more mixed religious population, such as the Netherlands. Likewise, an Eastern Orthodox might be more discriminated in the Netherlands than he would be in an Orthodox country such as Bulgaria.

The most common alternative to correspondence studies is quantitative research based on survey data. Quantitative research offers advantages to conducting comparative analyses. This is due to two reasons. First, survey data allows researchers to compare different religions in a more efficient way. When people within the same survey have indicated which religion they follow and have indicated their labour market outcomes such as employment status and income, they can easily be compared using regression analysis. These regressions can then be used to investigate the relation between labour market outcomes and following a specific religion. Second, survey data can provide an international perspective. If the survey is taken in multiple countries, the situation within these countries can be compared too. Naturally, there are also some disadvantages of quantitative research. First, quantitative studies rely on data at one specific moment and therefore are only able to provide circumstantial evidence. Second, the religion of a worker is less visible for an employer than for example his ethnicity. Consequently, variables on religion might correlate with other variables within the data and therefore religious discrimination might be more difficult to observe. Still, quantitative research is the best method to provide a comparative analysis on country differences, so it can be used to better address where policy intervention is needed (Reale, 2014).

In this paper I will investigate how in EU labour markets, outcomes vary due to religious discrimination. To do this, I will use an important characteristic of religious discrimination, which is called religiosity. Religiosity is the quality or state of being religious. It refers to people's varying tendencies to commit themselves to religious beliefs, principles, and activities. Religiosity therefore not only refers to the religion an individual follows but also to what extent he chooses to adhere to his believes. In other words, it is the intensity of a person's beliefs (Ellis, 2019). This concept of religiosity is not only important for an individual but also has its effects on the religious culture of a country. A higher national religiosity may indicate that

people identify more with their majority religion and therefore are less prone to interact with people following a different religion (Yendell & Huber, 2020). Overall, this research paper will show a comparative perspective on religious discrimination in Europe. It will provide guidance to where in the EU most resources are needed in order to meet the EU's own guidelines of taking appropriate action against all forms of intolerance and discrimination against persons because of their religion or belief. Therefore, my research question is as follows:

Which religions face the greatest labour market discrimination in the European Union and how is this related to the religiosity of an individual or of a country?

1. *What is the relation between the proportion of people following a religion in a country and labour market discrimination of that religious group?*
2. *What is the relation between the religiosity of a country and labour market discrimination for different religious groups?*
3. *What is the relation between the religiosity of an individual and labour market discrimination for different religious groups?*

Survey data are more efficient when comparing religions and are more capable of providing an international perspective. Therefore, I used quantitative data from the European Value Survey, which includes information on both religion as well as labour market outcomes. This paper will first set apart the literature on this subject, starting with the economics of discrimination and following with the most relevant theories on religious labour market discrimination. Next, the data and estimation method will be explained and discussed focusing on three labour market outcomes and three variables on religiosity. After this, the results of the different regressions will be explained and discussed, ending with a conclusion. In the Appendix, the full version of all tables not yet provided in the main body of this paper are shown. For any details on the data, please refer to the dataset.

2. Literature Review

2.1 The Economics of Discrimination

The economics of discrimination can be distinguished into two different sources of discrimination: taste-based discrimination and statistical discrimination. The concept of taste-based discrimination was first construed by Gary Becker (1957). In his book *The Economics of Discrimination*, he imagines two groups of people, black workers and white workers, who are perfect substitutes in production. He uses these groups to describe three models about different sources of discriminatory taste. In the first model, Becker refers to employers with discriminatory preferences. If discrimination depresses the wages of black workers relative to those of similarly qualified whites, Becker argues, a discriminator who does not want to hire black staff will have to pay more to hire white employees. This creates two costs: the black worker is paid less, and the discriminating employer incurs greater expense to obtain the same productivity. The consequence is that employers who do not engage in taste-based discrimination will mostly hire cheaper black workers and employers who do have discriminatory preferences will mostly hire white workers, which leads to segregation. The more discriminatory employers relative to non-discriminatory employers exist, the higher the wage gap will be. Therefore, Becker suggested that if enough non-discriminating employers entered the market to hire the cheapest labour, they could eventually eliminate the wage gap between different races. He thought that greater competition would function as a strong force in reducing most labour-market discrimination (Becker, 1957).

Still, competition alone cannot eliminate the wage gap due to the second and third model. The second model consists of discriminatory preferences by co-workers. Non-discriminatory employers, who hire both black and prejudiced white workers, are forced to pay a premium to the whites to induce them to work for him. They do not pay that premium if everybody in the workforce all have the same ethnicity. Each firm therefore prefers to employ either only white workers or some combination of black and unprejudiced white workers which would lead to further segregation. In the third source of taste-based discrimination, customers care about the race of workers producing the goods or services they purchase. They consider the price they pay for goods made by a firm with black workers to be the charged price plus their disutility. This increases with the amount of black input into production. If there is a price difference in the good, the most prejudiced customers will buy goods produced by whites and the least prejudiced will buy goods produced by black people, since those are cheaper. Therefore, in this model, customers subsidize discrimination (Becker, 1957; Guryan & Charles, 2013).

From an economic perspective, taste discrimination is by definition irrational because it brings concerns unrelated to productivity into the hiring decision (Koopmans, 2019). Sociologists explain this behaviour with the term homophily, the strong preference to interact with people who are socially and culturally similar to you. Homophily limits people's social worlds in a way that has powerful implications for the information they receive, the attitudes they form, and the interactions they experience. Homophily in race and ethnicity creates the strongest divides in our personal environments, with age, religion, education, occupation, and gender following in roughly that order (McPherson, 2001).

By the early 1970s, a number of economists had criticised Becker's model of taste-based discrimination and came up with their own. The most famous one was developed by Arrow and Phelps (1972), who proposed an alternative model of discrimination: statistical discrimination. In statistical discrimination models, economic actors attempt to assess some characteristic of individuals based on limited information. An example is an employer assessing the expected productivity of a worker he is considering hiring. Since he only has limited information, it is difficult to estimate the applicant's productivity. Nonetheless, the employer is aware of the applicant's characteristics, such as gender, ethnicity and sometimes religion. If an employer must choose between two candidates with equivalent observable skills, he may choose the candidate belonging to a group with higher average productivity on the assumption that the unobserved productivity component is likely to be higher for that candidate. Fundamentally, it is a lack of information that leads the employer to treat individuals as members of groups (Arrow, 1972; Phelps, 1972).

Employers who discriminate draw on signals of group membership to derive stereotypical assumptions about average characteristics of groups. These assumptions may have no basis in empirical facts, or they may refer to empirically existing differences across groups. Employers then underestimate the average productivities of a group and are more unwilling to hire these group members. They take part in error discrimination. Error discrimination and statistical discrimination are alike in that the employer has no nonpecuniary distaste for employing black people or women, but rather uses discrimination as a means to create a more productive workforce. However, there is a distinction between the two: error discrimination occurs when there are incorrect estimates of group averages, while statistical discrimination occurs when there are correct estimates of group averages. The negative consequence of error discrimination is that it can lead to inefficient hiring decisions, as employers may overlook suitable candidates based on mistaken assumptions about the group to which they belong (England & Lewin, 1989).

Distinguishing between taste-based and statistical discrimination is important not only in theory but also for developing appropriate policy responses. To address taste-based discrimination, efficient measures should aim to decrease bias against minorities, such as anti-racist campaigns or diversity training. On the other hand, to combat statistical discrimination, effective measures should target the factual basis on which it is founded, by eliminating obstacles and implementing support programs to improve the qualifications of minorities (Koopmans, 2019).

2.2 Taste-Based Religious Discrimination in the Labour Market

The root causes for religious discrimination in the labour market has long been a centre of discussion in the literature on religious discrimination. There are four theories, each of which explain the relation between labour market outcomes and religious discrimination. Two of these theories can be placed in the scientific tradition of taste-based discrimination and two within the tradition of statistical discrimination. In this section, the theories in line with taste-based religious discrimination will be discussed.

The first theory is the secularisation theory, which considers reactions to religion as a whole. Secularisation theory focuses on the demand for religion and predicts that religion will decline as societies develop. Through this modernisation, religion loses its influence on social institutions and individual consciousness. Although secularisation does not necessarily lead to a decline in religious belief, it uncouples religious expression from public life. What follows is the privatisation of religion, the belief that religion is properly confined to the private sphere and should be kept out of politics, academia, and the workplace (Hadden, 1987). The consequence is that expressions of religion that spill over into the public arena are viewed as inappropriate. Even expressions of religious identity by majority religious groups can evoke a negative reaction. Openly expressing religion in the workplace, regardless of the specific religion, may be perceived as potentially offensive to co-workers, clients, or customers. If we assume that workers who are religious are more likely to express their religion in public life than those who are non-religious, secularisation theory suggests that in a secular society employment chances are higher for those who are non-religious. Even if religious workers or jobseekers do not express their religion in public, if employers think they are more likely to, it can still hurt their employment chances (Wallace, 2014).

In 2015, Valfort did a field experiment on the labour market outcomes of Catholic, Jewish, and Muslim applicants in France, back then a predominantly Catholic country. She found that for equivalent CVs, practicing Jewish and Muslim applicants are disfavoured in

comparison to their Catholic counterparts. The likelihood of Catholics being called back by recruiters and invited to a hiring interview is 30% higher than for Jews and twice as high as for Muslims. Male Muslim applicants suffer the most discrimination. Compared to their Catholic counterparts, they have to send out four times as many CVs to get one call-back. However, when ordinary Muslim men are presented as secular, they no longer suffer discrimination (Valfort, 2015). This is in line with secularisation theory, in which expressions of religion are punished in labour outcomes. Recruiters possibly associate Muslim men in general with transgressive religious practices, and that acts as a deterrent to hiring.

The second theory, cultural distaste, explains that minority groups present challenges to the identities, cultural practices, and worldviews of majority groups. Majority groups, in turn, are characterised as having rigid, parochial, or ethnocentric outlooks on life, and thus they develop negative views toward minority groups. Cultural distaste originated from the social integration theory, which was first published by Durkheim in *The Division of Labor in Society* in 1893. In the text, he discussed how society had changed over time from small-scale groupings to larger and more interdependent ones with distinct divisions of labour (Durkheim, 1893). Social integration suggests that people must rely on others to provide for certain things that one cannot accomplish alone; thus the need for interdependence on a larger group is necessary. In the social studies, this concept has expanded to social particularism, the exclusive attachment to one's own group, party, or nation. Negative views about other groups develop historically, become culturally embedded, and are transmitted through socialisation (Ekici & Yucel, 2015). These views are relatively durable and are not easily overcome by contact with minorities. Distinct differences in cultural attitudes toward various religions are well-established. Furthermore, the religiosity of a group can have influence on the employment chances of workers who fall outside of the religious group. According to Eisinga et al. (1990), when people consider their religion to be the only true religion, they tend to have an unfavourable attitude toward other religion out-groups. Cultural distaste theory suggests regional differences in attitudes about different religions; therefore, we need to consider the religious culture of a country (Eisinga, 1990).

Koopmans et al conducted a study in Germany comparing discrimination rates among German-born applicants from thirty-five ethnic groups, including various racial and religious treatment groups. The study analysed almost 6,000 job applications from male and female applicants, in eight occupations throughout Germany. The purpose was to distinguish between taste and statistical sources of discrimination and identify the importance of ethnicity, phenotype, and religious beliefs triggering discrimination. Results showed that discrimination

was mainly driven by taste, related to cultural value distance between groups, whereas statistical discrimination based on average education levels played a small role. The study revealed that ethnic, racial, and religious groups with average values farther from German averages faced more discrimination. Conversely, minority groups with value patterns closer to Germany's average did not face discrimination from employers compared to ethnic German applicants without a migration background (Koopmans, 2019). This study is therefore in line with cultural distaste theory.

Wright et al. (2013) conducted a field experiment in New England, where they sent out fictitious resumes to advertised job openings, with random alterations indicating affiliation with one of seven religious groups (atheism, Catholicism, evangelical Christianity, Judaism, Islam, paganism, and a fictitious religious group) or a control group (no religion mentioned). The results showed that resumes with any religious affiliation received 25% fewer phone calls than the control group, and Muslim applicants received 33% fewer responses from employers. Additionally, discrimination against atheists, Catholics, and pagans (smaller religious groups) was observed. In a similar experiment, Wallace et al. (2014) sent fictitious resumes to advertised job openings throughout the American South and found that religious identity reduced the likelihood of receiving a response from employers by 26%. Muslims, pagans, and atheists were subjected to the highest levels of discriminatory treatment, while evangelical Christians experienced little discrimination, and Jews received no discernible discrimination. There was also evidence of preferential treatment towards Jews over other religious groups in employer responses (Wallace, 2014). The findings of both these studies best align with theoretical models of secularisation and cultural distaste theory.

Using multilevel modelling, a paper by Sweida-Metwally (2022) investigates ethno-religious penalties in unemployment and inactivity among men and women using the Understanding Society survey. The paper confirms previous findings of a Muslim penalty in the British labour market but also finds that being white is not a protection against the Muslim penalty. While affiliation with the Muslim White British group does not appear to be associated with penalisation, Muslim Arabs who traditionally identify as white are found to experience significant disadvantage. This suggests that the Muslim penalty might also be moderated by a person's country of origin. However, the paper also finds that considerable penalties remain for Muslims after adjusting to sociocultural attitudes, meaning that cultural distaste theory might not fully explain the Muslim penalty (Sweida-Metwally, 2022).

2.3 Statistical Religious Discrimination in the Labour Market

In this section, the remaining two theories that can explain the relation between labour market outcomes and religious discrimination will be discussed. These theories are in line with statistical discrimination.

The first theory, religious stratification theory, is based on the idea that the ability to accumulate material wealth is not equally distributed across various religious groups. As a result, many religious groups vary widely on measures of socioeconomic status such as education, income, and wealth. Religious stratification arises when religion becomes institutionalized in the laws and/or customs of society and begins to form a criterion for allocating social positions and the associated benefits. This leads to a relatively consistent ranking of religious groups based on their access to power, privilege, and prestige. More privileged religious groups can leverage their influence to maintain their societal status.

The consequence is that members of other religious groups have lower overall social standing and suffer from inadequate education and career opportunities (Wright, 2013). In most countries, people from the majority religion will be more privileged and therefore have better opportunities. According to religious stratification theory, people from minority religions will on average score lower in most labour related skills. Since in statistical discrimination models economic actors attempt to assess some characteristic of individuals based on limited information, this will lead members of the majority religion to hire people who share their religious affiliation. As a result, without regulation, religious discrimination will maintain itself (Davidson, 2008).

A study by Fox & Akbaba (2014) focuses on exploring the variation in the treatment of religious minorities in the West. They research the extent and causes of religious discrimination against 113 religious minorities in 36 democracies in the European Union (EU) and the West from 1990 to 2008. They find that Muslim and Christian minorities suffer from the highest levels of discrimination in the EU and Western democracies. This study supports the idea of an institutionalized religious discrimination based on the majority religion. However, states with high levels of religious legislation, indicating that they strongly support the majority religion, are also associated with high levels of religious discrimination. This tells us that the intensity of religious discrimination might be dependent on the level of legislation (Fox & Akbaba, 2014).

An article by Walls & Williams (2003) examines accounts of discrimination in employment against Irish Catholics in Glasgow from both majority and minority ethnic and religious perspectives. Of particular note is the existence of discriminatory practice affecting

Catholic attempts to move up the social scale. The study, based on quantitative data, suggest that discrimination was a likely component in Catholic employment experience for people born in 1952 and earlier. Furthermore, the data also suggest that, as experiences of discrimination were reported during the 1980s and 1990s, as well as the unmeritocratic practice of getting jobs informally, that anti-Catholic discrimination and disadvantage continues to be a feature of life in the west of Scotland in some private and public sector jobs, and particularly in middle-class work (Walls & Williams, 2003). Because Irish descended Catholics are unable to move up the social scale, they lack opportunities to improve their labour position and thus are susceptible to statistical discrimination.

The second theory, contact theory, holds that prejudice is derived from negative stereotypes based on limited information about minorities. This theory claims that as majority members' contact with minorities moves from casual and impersonal to sustained and personal, misunderstandings and stereotypes break down, common values and goals are identified, and positive intergroup interactions emerge that ultimately reduce prejudice and discrimination. Thus, prejudice is inversely related to size of the subordinate group. This perspective suggests that job candidates from the smallest religious groups would suffer the most discrimination (Pettigrew, 1998). In labour economics this theory is best put under the umbrella of error discrimination. Error discrimination involves inaccurate estimates of group averages. Error discrimination lowers the efficiency of hiring decisions because it leads employers to devalue suitable candidates based on mistaken assumptions about the groups they belong to (England & Lewin, 1989). These assumptions are more difficult to change when they belong to a group the employers are not frequently in contact with. Thus, error discrimination leads to decreasing labour market outcomes for smaller religious groups, especially if these groups are bound by prejudice.

Ekici & Yucel (2015) used data from the European Value Survey to analyse the correlation between religiosity and trust on religious and racial prejudice among respondents from thirty-seven current and potential member countries of the European Union. They found that religious particularism is correlated with more religious and racial prejudice. Furthermore, countries with higher levels of social capital are less likely to be prejudiced against neighbours from another religion, as well as against those who are from a different race. With regards to religious denomination, the study found that individuals who belong to the Islamic religion have the highest likelihood of having religious prejudice compared to members of other major religious denominations in Europe. However, nonreligious individuals have the highest odds of having religious prejudice compared to people in religious denominations. The study indicates

that there is significant religious prejudice within the EU, and that policymakers should be careful about these issues at the political level (Ekici & Yucel, 2015).

2.4 Hypothesis

Religious discrimination can be divided in taste-based discrimination and statistical discrimination. Taste-based discrimination predicts that employers add the costs of hiring employees not adhering to their beliefs or the beliefs of their co-workers above the normal salary of these workers, increasing the cost to hire them. Statistical discrimination predicts that employers attempt to assess some characteristic of individuals based on limited information. Therefore, they assume that any productivity factor that is common within a group, applies to everyone within that group. This research will use both these theories to answer the following questions

1. *What is the relation between the proportion of people following a religion in a country and labour market discrimination of that religious group?*

2. *What is the relation between the religiosity of a country and labour market discrimination for different religious groups?*

3. *What is the relation between the religiosity of an individual and labour market discrimination for different religious groups?*

Taste-based discrimination encompasses secularisation theory and cultural distaste theory. Secularisation theory states that in a secular society, non-religious individuals have better employment prospects, leading to worse labour market outcomes for religious individuals (Wallace, 2014; Valfort, 2013). For this theory, it is important to focus on a person's own individual religiosity. If a person's individual religiosity is higher, secularisation theory predicts that in more secularized societies, this would have a negative effect on his labour market outcomes. Since all EU-countries are to some extent secularized, individual religiosity is likely to be an important contributor to religious discrimination. Cultural distaste theory suggests that minority groups challenging the cultural practices and identities of the majority face greater difficulties in the labour market, particularly if they are further removed from the dominant religious culture. This theory is the most accepted in the literature and is in line with Eisinga (2019), Wright (2013), Wallace (2014), Koopmans (2021) and partially with Sweida-Metwally (2022). For this theory, it is important to investigate the religious culture of a country. There are two important contributors to the religious culture of a country. On the one hand, there is the size of a religious group. Cultural distaste theory predicts that a larger population of a certain religion tends to have a bigger impact on the culture of the country, Therefore, larger religious

groups should better labour market outcomes than smaller religious groups. On the other hand, there is the religious culture of a country, the national religiosity. Cultural distaste theory also suggests that if a country has a relatively large population following the same religion but the national religiosity is low, than its effect on labour market outcomes will be lower too. Next to this, the national religiosity may have a more negative effect on an individual following the majority religion in a country compared to an individual that does not follow this majority religion. With that, I expect that the higher the national religiosity of a country is, the worse the labour market outcomes will be for people not following that religion and the better the labour market outcomes will be for people that do follow that religion.
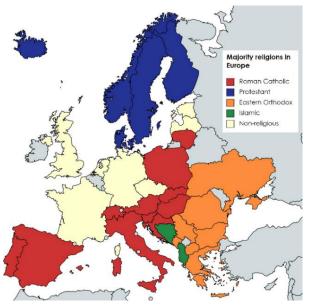
Statistical discrimination encompasses religious stratification theory and contact theory. According to the religious stratification theory, members of religious groups with lower social status experience more discrimination in the job application process due to limited opportunities for skill development and education (Fox & Akbaba, 2014; Walls & Williams, 2003). Furthermore, according to this theory, the size of a religious group is less important than the status of these religious groups. If prejudices exist for this group, their labour market outcomes will always be lower. Therefore, if this theory is true, I expect that the effect of the size of the religious population on labour market outcomes will be small or even insignificant. Contact theory explains that prejudice arises from stereotypes based on limited knowledge about minorities. Therefore, candidates from less-known or smaller religious groups may encounter more (error) discrimination (Pettigrew, 1998; Ekici & Yucel, 2015). The effects of this theory may differ per religion and should always go hand in hand with what we know of that specific religion. For example, we can assume that information on Catholics, Protestants and non-religious people is much more present in European countries than information on Muslims and Orthodox people.

In most recent literature, academics agree that in no country all labour market discrimination is taste-based or all labour market discrimination is statistical discrimination. Therefore, it is important to note that the theories on religious discrimination complement each other in many ways. The purpose of this research is not necessarily to find which theory is more dominant but to use these theories to provide a comparative analysis on labour market discrimination on different religions within the EU.

3. Data and Methodology

In this paper, I use data from the European Value Survey of 2017. This dataset contains around 60.000 observations in 37 countries in Europe. This paper is primarily focused on the EU; therefore I only include data on countries within the EU or those who are affiliated with it (Great Britain, Switzerland, Iceland, Norway, Bosnia and Herzegovina, Albania, Montenegro and Ukraine). In practice, this means that I removed the data from Belarus, Russia, Georgia, Azerbaijan and Armenia from the dataset. With 32 countries left, I looked at the data and which information was available per observation. If an observation did not contain information on the respondent's religion or on at least one labour market outcome, the observation was removed from the data. Respondents that were too young, retired or generally did not fall into the employment category for this paper (e.g. military service) were also removed from the dataset. The result was that around 28.000 observations remained in the dataset. Table 13 shows the remaining number of observations per country.

Next, I categorised the religions that every respondent reported into seven categories: Roman Catholic, Protestant, Eastern Orthodox, Islamic, non-religious, other, and no answer. To do this, I used a harmonised variable from the EVS. I used different methods of categorisation and decided on method 3 (see dataset). After categorisation, I used this data to estimate the religious populations per country (table 14) and determine what each country's majority religion is (table 15). Figure 1 shows graphically what each country's majority religion is according to EVS data. Table 1 shows the number of observations per (non-)religious groups that I will use in this research. The category 'other' and 'no answer' will not be used further in this research.

Figure 1: Majority religions in Europe

Table 1: Number of observations per religion

Variable	Catholic	Protestant	Orthodox	Islam	Non-religious
Employment	6383	3390	4512	1969	12252
Long-term Unemployment	6348	3376	4412	1941	12176
Income	5021	3160	3947	1761	10833

3.1 Dependent Variables

There are three main dependent variables in this study that are used to determine an individual's labour market outcomes: employment, long-term unemployment and income. Employment is a variable that indicates whether someone has paid work or not. Long-term unemployment indicates whether an individual has ever been unemployed for more than 3 months. Both these variables are dummy variables, meaning that their value is either 0 or 1. For the interpretation of the results it is important to note that employment (Employed=1, Unemployed=0) and long-term unemployment (Never long-term unemployed = 0, Ever long-term unemployed = 1) have reversed directions. Last, income is a harmonised variable on a scale from 1-10 that indicates in which income decile the individual falls for his respective country.

3.2 Main Independent Variables

There are three main independent variables in this paper, religious population, national religiosity and individual religiosity. The first variable, religious population, is a collection of variables, based on the religious population of each country as shown in table 14. There are five variables: Catholic, Protestant, Orthodox, Islam and non-religious. Each variable represents the religious percentage of that religion in the country the respondent is from. For example, if a respondent is from Albania, the variable Catholic for him will be equal to 0,096 (since Albania has 9,6% Roman Catholics). With that, within the same observation, the variable Islam will be equal to 0.764, and so on. These numbers are the same for everybody from the same country but differ for people from different countries.

The national and individual religiosity are variables based on the academic literature on religiosity and in particular on a study by Coutinho (2016). There are five dimensions of religiosity: experiential, ideological, communal, ritualistic, and consequential. The experimental dimension, relating to emotions raised by the supernatural, and the communal dimension, relating to affiliation with a religious group, will not be used in this study since the European Value Survey cannot accurately provide information on this. Therefore, just as in Coutinho (2016), this study primarily focuses on the remaining three dimensions: ideological, ritualistic, and consequential. The ideological dimension focuses on the core beliefs that are central to each religion and are shared by both Islam and Christianity. It centres around the belief in a personal god and encompasses beliefs in concepts such as life after death, hell and heaven. Although sin is also a part of Coutinho (2016), it is not provided in the EVS (2017). The ritualistic dimension encompasses religious practices like attendance of religious services and private prayer. The consequential dimension focuses on people's attitudes towards religious

norms and values. For this, indicators on the personal justification of homosexuality, abortion, euthanasia, and casual sex, were used.

To create the variables national religiosity and individual religiosity, I created three steps for each. First, I standardised the respondents' answers by subtracting the mean and dividing by the standard deviation. I did this by using all of the more than 60.000 observations in the dataset available including those in the five countries I later removed. This standardisation process ensures that the measurements are transformed to a common scale or distribution, with a mean of 0 and a standard deviation of 1. The resulting standardised values provide a representation of each observation relative to the mean and variability of the original dataset. Next, I used Principal Component Analysis (PCA) to transform the variables into a dimension. PCA is a method to simplify complex data. It finds the most important directions in the data where it changes the most. These directions are called principal components. By using PCA, we can reduce the number of variables and focus on the most relevant ones. This helps us understand the data better and makes it easier to analyse. Last, by using PCA again but this time with the three dimensions, I was able to create a variable for religiosity.

In the case of national religiosity, the variable only differs per country. Meaning that the variable national religiosity is the same for all those who are from the same country. Table 16 shows every country's national religiosity. Bosnia and Herzegovina (Islamic), Romania (Orthodox) and Poland (Catholic) have the highest religiosities. Denmark (Protestant), Sweden (Protestant) and Czechia (non-religious) have the lowest national religiosity. The individual religiosity is very similar to national religiosity, except that this variable differs per individual. In table 17, I have calculated the Cronbach Alpha's to assess the internal validity of both the created variables. As can be seen from the table, all values are higher than 0.7 which indicates at least an acceptable level of internal validity. For the national religiosity, these values are even higher.

3.3 Control Variables

The control variables are mostly standard. First, I control for the sex of an individual. This is a simple dummy variable in which male=0 and female=1. Second, I include the age of the respondent in the model, which is a number between 0 and 81. Third, I control for the origin of the respondent. Studies have shown that the ethnicity of an individual especially influences its labour market outcomes. Unfortunately, the dataset does not contain information on an individual's ethnicity. It does include information on the place where the respondent and his parents were born. I used this information to create two dummy variables. Origin Respondent

tells us whether the respondent is (=0) or is not (=1) born in the country. Origin Parents tells us if both parents are born in the country (=0) or at least one of the parents is born outside the country (=1). Fourth, I control for the education level of the respondent, which is widely accepted to be a strong contributor to employment outcomes. The education levels in the original dataset were harmonised into 8 categories. Based on the number of respondents, I split this variable into three dummy variables each representing a certain education level (see dataset). The last control variable is less common and represents the GDP per capita in every country. This variable is added because the wealth of a country may determine sociological outcomes, including those of religion, on labour market outcomes.

Table 2 shows the descriptive statistics for all variables. These are all not surprising. All variables have a number of observations equal to around 28,000. National and individual religiosity are standardised; therefore there minimum and maximum are close to -3 and 3. There are slightly more women in the dataset than men but they are almost equally divided. The mean age is 43, this is due to the removal of all students and retirees from the dataset. The mean of origin is close to 1, indicating that a lot of people and their parents within the dataset are born in the country they live in. Lastly, we see that GDP per capita differs quite a lot with Ukraine being the poorest nation per capita (€3097) and Switzerland being the richest nation per capita (€85217).

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Employment	28506	.885	.319	0	1
Long-term Unemployment	28253	.233	.423	0	1
Income	24722	5.828	2.687	1	10
Catholic	28506	.258	.281	0	.887
Protestant	28506	.189	.265	0	.799
Orthodox	28506	.164	.274	0	.861
Islam	28506	.064	.157	0	.764
Nonreligious	28506	.22	.149	.015	.584
National Religiosity	28506	-.351	1.489	-2.429	2.826
Individual Religiosity	28506	-.273	1.39	-2.365	2.923
Sex	28495	.517	.5	0	1
Age	28472	43.206	13.035	0	81
Origin Respondent	28506	.926	.262	0	1
Origin Parents	28506	.865	.342	0	1
Education Low	26656	.262	.44	0	1
Education Middle	26656	.351	.61	0	1
Education High	26656	.4	.49	0	1
GDP per capita	28506	35090.951	24907.268	3096.6	85217.4

Table 3 shows the multicollinearity for every variable. Multicollinearity refers to the presence of strong correlations among predictor variables in a regression model. It can cause issues in the interpretation of the coefficients and standard errors of the model. Variance Inflation Factor (VIF) is a measure of how much the variance of the estimated regression coefficients is increased due to multicollinearity. A VIF value of 1.0 indicates no multicollinearity, while values greater than 1.0 indicate some level of multicollinearity. The higher the VIF value, the stronger the correlation between the variable and the other predictors. Almost all variables have a relatively low VIF meaning that there is a low level of multicollinearity present in the model. Only the education variables are more strongly related to each other and GDP per capita is somewhat related to national religiosity, indicating that countries with a lower GDP per capita have a higher level of religiosity.

Table 3: Multicollinearity variables

	VIF
Catholic	1.2
Protestant	2.4
Orthodox	1.6
Islam	1.3
Non-religious	2.0
National Religiosity	2.7
Individual Religiosity	1.5
Sex	1.0
Age	1.0
Origin Respondent	1.7
Origin Parents	1.7
Education Low	2.9
Education Middle	2.8
Education High	3.3
GDP per capita	2.2
Mean VIF	1.9

3.4 Estimation Strategy

The dataset only contains data on one specific year per country (2017-2021). Therefore, the model I will use in this paper is cross-sectional. To determine the effects of religiosity on labour market outcomes, I estimate two main models, one on religious population and one on national religiosity. Each of these main models uses three different dependent variables: employment, long-term unemployment and income. Since employment and long-term unemployment are dummy variables, regressions that are run with these as the dependent variable are logarithmic. Income will be treated as a continuous variable. Therefore, regressions with income as the dependent variable are linear.

The first main model estimates the effect of religious population on the different labour market outcomes for every religious group. The variable religious population represents the variables Catholic, Protestant, Orthodox, Islam and non-religious as explained in section 3.2. In every regression only one of these variables is used. Next to this, the model ensures that only respondents who identify with the religion being analysed are included in each regression. For example, when examining the effects of the religious population of Roman Catholics (Catholic) on employment, only respondents who identify as Roman Catholic are included in that specific regression. This ensures that the analysis remains specific to the respective religious population being studied. Overall, this will result in five regressions for each dependent variable. By performing separate regressions for each group, the model enables us to understand the distinct relationship between religious population and labour market outcomes within each specific religious context.

Another important factor in these models is the variable of individual religiosity. This variable differs per respondent and gives a value to how strongly a person claims to adhere to his believes. By estimating the relation between the religiosity of an individual and different labour market outcomes, we might be able to see if the intensity of a person's believe is more important contributor than the religion he follows.

Labour Market Outcome (Religion respondent = X) = $\beta_1 ReligiouspopulationX$ + $\beta_2 IndividualReligiosity + \beta_3 Sex + \beta_4 Age + \beta_5 OriginRespondent + \beta_6 OriginParents + \beta_7 EducationLow$ + $\beta_8 EducationHigh + \beta_9 GDPpercapita + \varepsilon$

Labour Market Outcome	Religion respondent	Religious population
Employment	Roman Catholic	Catholic
Long-term Unemployment	Protestant	Protestant
Income	Eastern Orthodox	Orthodox
	Muslim	Islam
	Non-religious	Nonreligious

For the models on national religiosity, I have created a dummy variable for each religion (CatholicDummy, ProtestantDummy, OrthodoxDummy, IslamDummy, and NonreligiousDummy). These dummy variables indicate whether a specific religion is (=1) or is not (=0) the majority religion in that specific country. For example, a respondent from the Netherlands would have the dummy variable NonreligiousDummy be equal to 1 and the other variables be equal to 0. Table 15 shows the complete list of countries and their respective majority religions. These dummy variables allow us to differentiate between individuals who live in a country that have a majority of people following the same religion and individuals who follow a minority religion compared to most people in the country. The dependent variables in these models remain the same labour market outcomes (employment, long-term unemployment and income).

In the models on national religiosity, for each religious group, one regression is conducted for countries that align with the respondent's religion and another regression for countries that do not align with the respondent's religion. Next to this, the variable individual religiosity again indicates whether the way these individuals follow their religion is important for their labour market outcomes. By analysing these regressions, I aim to understand how national religiosity, in conjunction with the majority religious context, influences employment, long-term unemployment, and income for different religious groups.

Labour Market Outcome (Majority religion = X, Religion respondent /=/ X) $= \beta_1 NationalReligiosity + \beta_2 IndividualReligiosity + \beta_3 Sex + \beta_4 Age + \beta_5 OriginRespondent + \beta_6 OriginParents + \beta_7 EducationLow + \beta_8 EducationHigh + \beta_9 GDPpercapita + \varepsilon$

Labour Market Outcome (Majority religion = X, Religion respondent = X) $= \beta_1 NationalReligiosity + \beta_2 IndividualReligiosity + \beta_3 Sex + \beta_4 Age + \beta_5 OriginRespondent + \beta_6 OriginParents + \beta_7 EducationLow + \beta_8 EducationHigh + \beta_9 GDPpercapita + \varepsilon$

The other models serve as a means to delve deeper into some specific relationships that flow out of the previous models. In the first model, I focus in on Muslims in Christian nations. In this model, I estimate if the national religiosity of Christian countries is important for the labour market outcomes of Muslims. With that, we can see within this same model if the individual religiosity of Muslims in Christian countries is important for their labour market outcomes. In the second and third model, I compare Christian people in non-religious countries to non-religious people in Christian countries. I specifically look at whether non-religious people in Christian countries face more religious discrimination when the national religiosity of these

Christian countries is higher. In non-religious countries I explore the individual religiosity of these Christians and its effect on their labour market outcomes.

Labour Market Outcome (Majority Religion = Christian, Religion respondent = Muslim) = $\beta_1 NationalReligiosity + \beta_2 IndividualReligiosity + \beta_3 Sex + \beta_4 Age + \beta_5 OriginRespondent + \beta_6 OriginParents + \beta_7 EducationLow + \beta_8 EducationHigh + \beta_9 GDPpercapita + \varepsilon$

Labour Market Outcome (Majority Religion = Christian, Religion respondent = Non-religious) = $\beta_1 NationalReligiosity + \beta_2 Sex + \beta_3 Age + \beta_4 OriginRespondent + \beta_5 OriginParents + \beta_6 EducationLow + \beta_7 EducationHigh + \beta_8 GDPpercapita + \varepsilon$

Labour Market Outcome (Majority Religion = Non-religious, Religion respondent = Christian) = $\beta_1 IndividualReligiosity + \beta_2 Sex + \beta_3 Age + \beta_4 OriginRespondent + \beta_5 OriginParents + \beta_6 EducationLow + \beta_7 EducationHigh + \beta_8 GDPpercapita + \varepsilon$

4. Results

4.1 Main Results: Religious Population

In this subsection, I will discuss the results of the regressions of the religious population variables on the different labour market outcomes. The implication of these results can be found in section five. In my hypothesis, I predicted that, based on cultural distaste theory, the larger a religious group is, the better its labour market outcomes will be. With that, secularisation theory predicts that people with a higher individual religiosity have worse labour market outcomes. Religious stratification theory may lower these effects for certain religious groups that have a lower overall social standing and contact theory mostly applies only to the lesser known religious groups. The results for the regressions can be found in table 4 (full results including control variables, table 18-20). They are, for the most part, in line with the literature. The results on employment and long-term unemployment are in logodds which means that they can only be interpreted based on whether they are negative or positive. Therefore, in table 5, I have provided information on how much the employment chances increase or decrease when the percentage of religious followers of that religion in a country increases with 1 percentage-point. Income is a continuous variable between 1 and 10.[1]

For Catholics, Protestants and non-religious people, almost all results are consistent with the literature. The regressions on Catholics indicate that in most cases, labour market outcomes improve when the relative population of Roman Catholics within a country increases. The results show that for every 1% increase in the population of Catholics, the employment chances increase with 0.031%. The data does not show any significant effect on long-term unemployment. Income does increase for Catholics when there are more Catholics present within a country. The estimations on Protestants are not significant for both employment variables. We can also see this in table 5, where the odds are fairly close to zero. On the other hand, the effect of the relative religious population of Protestants on income is significantly positive. This means that Protestants have a higher income in countries where there are relatively more Protestants. The effects of non-religious people and labour market outcomes are, for the most part, also in line with these findings. We see that for every 1%-point, the population of non-religious people in a country increases, non-religious people are 0.090% more likely to be employed. With that, they are 0.156% less likely to be unemployed for more than 3 months. However, the effect of the population of non-religious people is not significant

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[1] The regressions of religious population on income are done with a robust standard deviation since there was heterogeneity present within these regressions. The other regressions do not have this problem

on income. Looking at the data, we see that in many countries in Europe, non-religious people fall into higher income categories. Therefore, the effect is less visible for this group.

The results on Orthodox people and Muslims are only partially in line with the literature. The results for Orthodox people are somewhat inconsistent. On the one hand, we see that if there are relatively more Orthodox people in a country, the results indicate that Orthodox people are more likely to be employed. With that, we see that they are less likely to be long-term unemployed. These effects are considerable in size. The results show that for every 1%-point increase in the population of Orthodox people, the employment chances increase with 0.277% and the long-term unemployment chances decreases with 0.403%. On the other hand, their income does decrease when there are relatively more Orthodox people within a nation. These effects are not fully consistent with the literature but will be explained better in section 5. The effect for Muslims is (somewhat) significant for all labour market outcomes, however all outcomes are in the unexpected direction. According to the data, a higher percentage of Muslims in a country leads to lower employment chances (0.209% per %-point), higher long-term unemployment chances (0.353% per %-point) and a lower income for Muslims relative to other religious groups within a country.[2] These effects cannot be explained by the literature alone.

The second main independent variable is individual religiosity. This variable refers to the intensity with which a person believes and propagates his faith. Note that individual religiosity for non-religious people could say something about their level of cultural religiosity, i.e. whether they see themselves as, for instance, cultural (but not religious) Christians and therefore adhere to certain beliefs. However, that is outside the scope of this paper, and therefore I will not interpret these numbers. When looking at the tables, we see that the effects are either not significant or negative. If the effect is negative, this is consistent with the literature, namely with the secularisation theory. If the effect is not significant, this might be because the number of observations is too small. Since I am not able to add more observations, I did a robustness check in section 4.3.3 with all religions to explore the effect for individual religiosity.

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[2] After adding the control variable Employment rate, the effects do not change significantly (for all religious groups)

Table 4: Regression results religious population on labour market outcomes

Religious population	Roman Catholics	Protestants	Eastern Orthodox	Muslims	Non-religious
VARIABLES	Employment	Employment	Employment	Employment	Employment
Catholic	0.332**				
	(0.160)				
Protestant		-0.0618			
		(0.462)			
Orthodox			2.310***		
			(0.266)		
Islam				-1.039***	
				(0.250)	
Nonreligious					1.292***
					(0.225)
Individual Religiosity	-0.0924**	-0.180**	-0.0469	-0.103**	0.00607
	(0.0371)	(0.0783)	(0.0517)	(0.0482)	(0.0472)
Observations	6,348	3,371	3,263	1,937	11,701
VARIABLES	Long-term Unemployment	Long-term Unemployment	Long-term Unemployment	Long-term Unemployment	Long-term Unemployment
Catholic	-0.184				
	(0.131)				
Protestant		0.383			
		(0.269)			
Orthodox			-2.098***		
			(0.216)		
Islam				1.592***	
				(0.240)	
Nonreligious					-1.050***
					(0.156)
Individual Religiosity	0.0329	0.0704	-0.119***	-0.0401	-0.0688**
	(0.0289)	(0.0487)	(0.0408)	(0.0453)	(0.0339)
Observations	6,314	3,359	3,182	1,911	11,639
VARIABLES	Income	Income	Income	Income	Income
Catholic	0.494***				
	(0.152)				
Protestant		2.184***			
		(0.216)			
Orthodox			-0.465**		
			(0.220)		
Islam				-0.467*	
				(0.258)	
Nonreligious					-0.257
					(0.167)
Individual Religiosity	-0.127***	-0.248***	-0.0619	-0.0663	-0.376***
	(0.0326)	(0.0426)	(0.0427)	(0.0518)	(0.0360)
Observations	4,995	3,146	2,802	1,736	10,345

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 5: Regression results of Employment variables in odds

	Employment	Std.Err.	Long-term Unemployment	Std.Err.
Catholic	0.031%**	0.015	-0.029%	0.020
Protestant	-0.002%	0.018	0.040%	0.028
Orthodox	0.277%***	0.031	-0.403%***	0.040
Islam	-0.209%***	0.049	0.353%***	0.051
Nonreligious	0.090%***	0.016	-0.156%***	0.023

4.2 Main Results: National Religiosity

In this section, I will discuss the results of the regressions surrounding the variable National Religiosity. National religiosity is a number that gives a value to the religious culture of a country. If the value is higher, this means that people in this country, in general, experience their religion more intensely. My hypothesis is that people who do not follow the majority religion in countries with a higher national religiosity will be more discriminated against than people who do follow the majority religion within the country. This would align with both taste-based as well as with statistical discrimination. The results are generally not significant or not consistent. They show almost no clear effect in any direction. However, when delving deeper into certain religious groups, we do find some results. The implications of these results will again be discussed in section 5.

In table 6, we can see the results for two sets of regressions. The first set measures the effect of national and individual religiosity of people who do not follow the majority religion of a country. We can immediately see that national religiosity does not have a significant effect on employment outcomes for both Catholics as well as Protestants. For Orthodox people, these effects are significant, however not in the expected direction. According to the results, a higher national religiosity in Orthodox countries leads to higher employment outcomes for people not following that religion. This does not align with the literature. When looking at income, we also see inconsistencies. The effect for non-Protestants in Protestant countries and non-Orthodox in Orthodox countries is in the expected direction, meaning that a higher national religiosity leads to a lower income for people not following that religion. However, the effect for non-Catholics in Catholic countries is also significant in the other direction.

The second set of regressions shows the results for individuals who live in a country with a certain Christian religious majority and follow the religion of that majority. The employment effect for Catholics in Catholic nations remains insignificant. The effect for income in these countries has switched direction, meaning that a higher national religiosity in Catholic nations is better for non-Catholics than it is for Catholics, which is not in line with the literature. For Protestants, we now see a significant effect for both employment and income. Again, these results show that in comparison with non-Protestants, Protestant people have worse labour market outcomes in Protestant countries when the national religiosity of these countries is higher. Even for Orthodox people, where all the results are significant, we can see that the labour market outcomes are better for non-Orthodox people in Orthodox nations than they are for Orthodox people in Orthodox nations when the national religiosity is higher. All of these findings are not in line with the literature.

Table 6: Regression results minority religion (National religiosity)

VARIABLES	Employment	LongUnemployed	Income	Employment	LongUnemployed	Income	Employment	LongUnemployed	Income
	Not Catholic in Catholic countries			Not Protestant in Protestant countries			Not Orthodox in Orthodox countries		
National Religiosity	-0.0534	0.0237	0.129**	-0.105	0.0479	-0.438***	0.235***	-0.260***	-0.166**
	(0.0695)	(0.0532)	(0.0632)	(0.230)	(0.136)	(0.117)	(0.0816)	(0.0674)	(0.0724)
Individual Religiosity	-0.0149	-0.0334	-0.110***	-0.159	0.0439	-0.294***	-0.150***	0.0442	-0.197***
	(0.0493)	(0.0363)	(0.0390)	(0.132)	(0.0758)	(0.0673)	(0.0515)	(0.0425)	(0.0475)
Observations	4,479	4,454	3,680	2,852	2,847	2,767	1,626	1,584	1,371
	Catholic in Catholic countries			Protestant in Protestant countries			Orthodox in Orthodox countries		
National Religiosity	0.0352	-0.00519	-0.0861*	-0.575**	0.0935	-0.505***	0.230***	-0.370***	-0.0944*
	(0.0588)	(0.0461)	(0.0514)	(0.292)	(0.176)	(0.135)	(0.0632)	(0.0509)	(0.0519)
Individual Religiosity	-0.0490	-0.00718	-0.0481	0.0114	0.0458	-0.258***	-0.0483	-0.0926*	-3.99e-05
	(0.0428)	(0.0334)	(0.0369)	(0.129)	(0.0739)	(0.0550)	(0.0606)	(0.0474)	(0.0489)
Observations	5,068	5,041	3,853	2,070	2,068	1,994	2,668	2,595	2,251

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Ultimately, national religiosity may not be a very good indicator of labour market chances for minority or majority religions in countries with a specific majority Christian population. Most effects are unexpected, insignificant or inconsistent. A possible reason for this could be that the Christian groups do not differ enough in identity and therefore a higher or lower national religiosity has an insignificant effect on these groups. The next two tables are meant to delve deeper into the relation between Muslims, non-religious people and Christians.

Table 7 shows the regressions results for Muslims in Christian countries. Based on the literature, I would expect that a higher level of both national religiosity (for Christian countries) and individual religiosity (for Muslims) would result in worse labour market outcomes. Unfortunately, most likely because of the number of observations, almost all results are insignificant. Table 8 focuses on Christians in non-religious countries and non-religious people in Christian countries. Because non-religious people are not religious, I did not include national religiosity for a non-religious nation and individual religiosity for non-religious individuals. What we see, is that a higher national religiosity in Christian countries leads to a lower income for non-religious people. Next to this, we see that a higher individual religiosity in non-religious nations leads to worse labour market outcomes in employment and income. Both of these effects are consistent with the literature.

Table 7: Regression results Muslims in Christian countries

VARIABLES	Muslims in Christian countries		
	Employment	LongUnemployed	Income
National Religiosity	-0.254*	-0.0157	0.0674
	(0.132)	(0.114)	(0.127)
Individual Religiosity	-0.00545	-0.0568	-0.161*
	(0.0924)	(0.0810)	(0.0892)
Observations	595	580	485

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 8: Regression results Christians and Non-religious people

VARIABLES	Non-religious in Christian country			Christian in Non-religious country		
	Employment	Long Unemployed	Income	Employment	Long Unemployed	Income
National Religiosity	-0.0103	-0.0340	-0.559***			
	(0.0491)	(0.0342)	(0.0354)			
Individual Religiosity				-0.173**	0.0422	-0.392***
				(0.0687)	(0.0428)	(0.0369)
Observations	7,478	7,435	6,579	3,569	3,555	3,317

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

4.3 Robustness Checks

In this section, I will conduct four robustness checks to account for possible inconsistencies in the results because of the data or the regression method with this data. The complications of these results will be considered in section 5.

4.3.1 Income Dummy

In previous regressions, income is used as a continuous variable with a number between 1 and 10. To check if this was the right choice, I did a regression with all religious population variables on an income dummy. This income dummy separates all income groups between a group with high incomes (=1) and a group with low incomes (=0). These groups are still relative to the income levels in every respective nation. In table 9, we can see that most effects remain consistent. Only the religious population variable for Muslims is not significant anymore, which is not necessarily a problem. Therefore, using income as a continuous variable was most likely a valid option.

Table 9: Robustness check Income Dummy

VARIABLES	IncomeDummy Roman Catholics	IncomeDummy Protestants	IncomeDummy Eastern Orthodox	IncomeDummy Muslims	IncomeDummy Non-religious
Catholic	0.330***				
	(0.124)				
Protestant		1.597***			
		(0.184)			
Orthodox			-0.824***		
			(0.220)		
Islam				-0.228	
				(0.292)	
Nonreligious					-0.0448
					(0.137)
Individual Religiosity	-0.0773***	-0.212***	-0.0423	-0.0640	-0.279***
	(0.0269)	(0.0357)	(0.0418)	(0.0545)	(0.0304)
Observations	4,995	3,146	2,802	1,736	10,345

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

4.3.2 Christian and Christian Dummy

In section 4.1, I divided Christianity into three subgroups, namely Catholic, Protestant, and Orthodox, and assumed that they were significantly different. In table 10, I have made a similar regression as in section 4.1, but I added all Christians together into one religious population variable. We now see that almost all effects become significant. The results indicate that the more Christians there are in a country, the better the labour market outcomes will be for Christians living in that country (variable Christian). We also see that if a country is in majority Christian (Catholic, Protestant or Orthodox), then Christians have better labour market outcomes in that country compared to countries that are in majority non-religious or Islamic.[3] Therefore, adding all Christian group together is a valid, if not better, option.

Table 10: Robustness check Christian and Christian Dummy

VARIABLES	Christian			Christian Dummy		
	Employment	LongUnemployed	Income	Employment	LongUnemployed	Income
Christian	1.279***	-0.965***	0.743***			
	(0.160)	(0.126)	(0.137)			
Christian Dummy				0.373***	-0.160***	0.141**
				(0.0745)	(0.0585)	(0.0603)
Individual Religiosity	-0.0947***	-0.00885	-0.205***	-0.0808***	-0.0157	-0.204***
	(0.0275)	(0.0206)	(0.0212)	(0.0274)	(0.0206)	(0.0212)
Observations	12,982	12,855	10,943	12,982	12,855	10,943

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

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[3] Even when excluding the two majority Islamic countries (Bosnia and Herzegovina and Serbia), the results remain consistent.

4.3.3 Individual Religiosity All Religions

To check the variable individual religiosity and see if the effect is truly significant with as much observations as possible, I have added together all people who are religious (excluding those who are non-religious) and did a regression focusing on this specific variable. We can see that a higher individual religiosity tends to lead to lower employment and income. Only in the case of long-term unemployment, this effect is insignificant. Therefore, individual religiosity is likely to be an indication for religious discrimination and may contribute to it.

Table 11: Robustness check Individual religiosity all religions

VARIABLES	Employment	LongUnemployed	Income
Individual Religiosity	-0.111***	0.000757	-0.201***
	(0.0230)	(0.0182)	(0.0195)
Observations	14,919	14,766	12,679

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

4.3.4 Country Dummies

This robustness check deals with any country-specific effects that might be present in the regressions of section 4.1. When we compare table 12 to table 4, we can see that a lot of results have become insignificant. Only the effects of individual religiosity remain fairly consistent, even when including the country dummies. This does not necessarily mean that the previous findings were not accurate. However, it does reflect that there are a lot of country-specific circumstances that affect how religious population works on the different labour market outcomes.

Table 12: Robustness check Country dummies Employment

VARIABLES	Employment Roman Catholics	Employment Protestants	Employment Eastern Orthodox	Employment Muslims	Employment Non-religious
Catholic	-1.648				
	(2.324)				
Protestant		8.357			
		(6.368)			
Orthodox			6.820		
			(8.544)		
Islam				-49.20*	
				(26.89)	
Nonreligious					-1.434**
					(0.696)
Individual Religiosity	-0.0576	-0.0775	0.00850	-0.0878*	-0.0337
	(0.0401)	(0.0871)	(0.0550)	(0.0519)	(0.0504)
Observations	6,188	3,354	3,224	1,925	11,701
VARIABLES	Long-term Unemployment	Long-term Unemployment	Long-term Unemployment	Long-term Unemployment	Long-term Unemployment

Catholic	0.719				
	(1.716)				
Protestant		-6.141			
		(5.141)			
Orthodox			-4.633		
			(3.079)		
Islam				1.577	
				(22.05)	
Nonreligious					-0.151
					(0.487)
Individual Religiosity	0.0171	0.0486	-0.111**	-0.0211	-0.0560
	(0.0312)	(0.0527)	(0.0434)	(0.0493)	(0.0365)
Observations	6,307	3,346	3,173	1,910	11,639
VARIABLES	Income	Income	Income	Income	Income
Catholic	0.314				
	(0.950)				
Protestant		4.522**			
		(1.900)			
Orthodox			1.254		
			(1.075)		
Islam				-0.433	
				(0.487)	
Nonreligious					-2.089***
					(0.569)
Individual Religiosity	-0.0704**	-0.212***	-0.0519	-0.120**	-0.250***
	(0.0331)	(0.0417)	(0.0431)	(0.0526)	(0.0374)
Observations	4,995	3,146	3,947	1,761	10,833

5. Discussion

In this section, I will explain the results of section 4 using my subquestions. First, what is the relation between the proportion of people following a religion in a country and labour market discrimination of that religious group? We saw that the effects for Catholics, Protestants and non-religious people were for the most part consistent with the literature. According to cultural distaste theory, larger religious group tend to have a bigger impact on culture and are less prone to prejudice (Wright, 2013). Taste-based discrimination predicts that employers add the costs of hiring employees not adhering to their beliefs or the beliefs of their co-workers to the normal salary of these workers, increasing the cost to hire them. Therefore, the larger a religious group is, the more employers there will be following that religion, and the better the labour market outcomes for people also following that religion will be (Becker, 1957). There were some labour market effects that were not significant. A reason for this could lie in the religious stratification theory. If a religious group enjoys a relatively high level of education and professional skill development, they can form a dominant group even in countries with fewer members of that religious group in general (Fox & Akbaba, 2014). Still, the expected effects are present for these groups.

The regressions on the Orthodox and Islamic population are more difficult to interpret using the theories of religious discrimination. We do see that Orthodox people have better employment opportunities when more people are Orthodox. For this group, this effect could not only be explained by cultural distaste but also by contact theory. The Orthodox religion is generally more unknown in non-Orthodox societies which could lead to wrong assumptions about their labour market productivity and thus to error discrimination (England & Lewin, 1989). However, the lower income could not be explained by this theory. A possible reason for this is that high-paying jobs in these countries may be reserved for other religious groups. For Muslims, all the effects of religious population on labour market outcomes are in the unexpected direction. Previously, I expected that in countries with more Muslims (e.g. Bosnia or Albania), Muslims would have a lower overall social standing and are therefore not able to acquire better education or professional skills. This would align with religious stratification theory. However, the robustness check on country dummies disproves this. Even after adding employment rate as a control variable, this does not change the outcomes significantly. Therefore, there are either other problems with the data or Muslims do in fact not benefit from more Muslims being present within a country in the EU and affiliated countries. All the same, more research on this topic is needed.

Next, what is the relation between the religiosity of a country and labour market discrimination for different religious groups? The results of national religiosity on the labour market outcomes are inconsistent. Therefore, it is difficult to align the results with the literature. There are two possible conclusions to draw from the results. Either national religiosity is not a significant contributor to religious labour market discrimination, or my regression method is not an appropriate tool to estimate the effect of national religiosity on labour market outcomes. While the first one requires more research, the second one may lie in the fact that the three Christian religious groups are for employers not significantly different. As said before, the religion of a worker is less visible for an employer than for example his ethnicity. Consequently, an employer might be less likely to discriminate between different Christian denominations. To account for this, I did some extra regressions between Muslims, Christians and non-religious people. The results indicate that the more Christians there are in a country, the better the labour market outcomes will be for Christians living in that country (section 4.3.2). Furthermore, we see that a higher national religiosity in Christian countries leads to a lower income for non-religious people, and a higher individual religiosity in non-religious nations leads to worse labour market outcomes. When a country has either a high or a low level of religiosity, taste-based economics apply. When a country is more religious, cultural distaste theory dominates, meaning that people not following that religion tend to have worse labour market outcomes. When a country is less religious, secularisation theory dominates, meaning that non-religious people, even in Christian countries, have better labour market outcomes. Still, national religiosity is a factor that may require more investigation.

Lastly, what is the relation between the religiosity of an individual and labour market discrimination for different religious groups? Based on the results, the variable individual religiosity has proven to be a consistent contributor to religious discrimination. As mentioned before, this effect is consistent with secularisation theory. In a secular society, non-religious individuals have better employment prospects, leading to worse labour market outcomes for religious individuals (Wallace, 2014). Still, conclusions on this variable must be carefully drawn. National and individual religiosity are variables based on certain factors of religiosity. These factors, may vary greatly in their impact. For national religiosity, this variation is less important, since national religiosity is used to determine the difference between countries. Meanwhile, individual religiosity differs per person, and since there are plenty of ways to compose this variable, there are also plenty of ways for its effect to be different. Further research can use other methods to compose this variable and see if individual religiosity is truly an important contributor to religious labour market discrimination.

6. Conclusion

Religious discrimination in the European labour market is still prevalent within the European Union. Addressing this issue aligns with the EU's guidelines against intolerance and discrimination based on religion or belief. Investigating the relationship between labour market outcomes and religious adherence is crucial for appropriate action. This study focused on religiosity, the extent of an individual's religious beliefs and adherence, which influences both individuals and the religious culture of a country. By examining the connection between religiosity and labour market discrimination, this paper aimed to provide a comparative analysis of different religions within the European Union and identify areas requiring policy intervention as per the EU's guidelines. Discrimination in the labour market encompasses taste-based discrimination, driven by biased preferences or stereotypes, and statistical discrimination, resulting from limited information and judgments based on group averages. Policy responses should tackle both forms of discrimination, addressing bias and improving qualifications of minority groups. In the context of religious discrimination, taste-based discrimination can stem from secularisation and cultural distaste, while statistical discrimination can arise from religious stratification and contact theory.

In conclusion, which religions face the greatest labour market discrimination in the European Union and how is this related to the religiosity of an individual or of a country? The results of this paper indicate that for most religions (Roman Catholicism, Protestantism, Non-religious and partially Eastern Orthodoxy), the more people following the same (non-)religion in a country, the higher the chances that people following that same religion have better labour market outcomes. According to cultural distaste theory, this is due to the fact that larger religious groups tend to have a bigger impact on culture and are less prone to prejudice. Taste-based discrimination predicts that employers add the costs of hiring employees not adhering to their beliefs or the beliefs of their co-workers to the normal salary of these workers, increasing the cost to hire them. Therefore, the larger a religious group is, the more employers there will be following that religion, and the better the labour market outcomes for people also following that religion will be. This effect is not present for Muslims in the data. When it comes to national religiosity, the findings suggest that national religiosity is most likely not a very good indicator of labour market chances. One possible reason for this is that there is not enough differentiation between the Christian groups (Catholic, Protestant and Orthodox), leading to an insignificant impact of national religiosity on these groups. When comparing Christians to non-religious individuals, the results become more significant. Here we see that taste-based economics apply regardless of the country's religiosity level. Overall, there is a negative relation between

individual religiosity and labour market outcomes. This is in line with secularisation theory, which states that as societies become more modern and secular, people's religious beliefs and practices tend to diminish.

This research provided several observable patterns between religious groups, the religious population of that group within a country, national religiosity and individual religiosity. Future research should delve deeper into the relation between Muslims, non-religious people, and Christians. That way, the relation between labour market outcomes and the national religiosity of Christian nations, and the individual religiosity of Muslims within these nations could be explained better. I am positive that this paper will provide the comparative analysis which it strived to provide and has contributed to the academic literature on religious discrimination. Eventually, with the right knowledge of the phenomenon, I believe that religious discrimination within the EU can be minimalised. Hopefully, this analysis is able to contribute to that process.

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8. Appendix

8.1 Data Description

Table 13: Number of observations per country

Country	Freq.	Percent
Albania	761	2.67
Austria	932	3.27
Bosnia and Herzegovina	1015	3.56
Bulgaria	827	2.90
Croatia	785	2.75
Czechia	805	2.82
Denmark	1904	6.68
Estonia	557	1.95
Finland	537	1.88
France	900	3.16
Germany	1147	4.02
Great Britain	964	3.38
Greece	1738	6.10
Hungary	707	2.48
Iceland	1134	3.98
Italy	1164	4.08
Latvia	624	2.19
Lithuania	888	3.12
Montenegro	477	1.67
Netherlands	1124	3.94
North Macedonia	743	2.61
Norway	728	2.55
Poland	742	2.60
Portugal	571	2.00
Romania	747	2.62
Serbia	773	2.71
Slovakia	793	2.78
Slovenia	510	1.79
Spain	616	2.16
Sweden	645	2.26
Switzerland	1882	6.60
Ukraine	766	2.69
Total	28506	100.00

Table 14: Religious populations

Country	Catholic	Protestant	Orthodox	Islam	Non-religious	Other	No answer
Albania	9,6%	0,5%	6,6%	76,4%	3,8%	0,5%	2,6%
Austria	62,6%	3,8%	1,6%	3,5%	17,7%	1,3%	9,4%
Bosnia and Herzegovina	16,0%	0,0%	26,6%	53,4%	2,3%	0,2%	1,6%
Bulgaria	1,0%	0,3%	57,9%	13,3%	19,9%	0,3%	7,3%
Croatia	77,5%	0,3%	0,7%	0,3%	12,0%	0,5%	8,7%
Czechia	20,4%	1,7%	0,8%	0,1%	55,5%	2,2%	19,4%
Denmark	0,0%	79,9%	0,0%	0,7%	11,4%	2,6%	5,4%
Estonia	0,5%	6,6%	11,2%	0,2%	58,4%	2,6%	20,6%
Finland	0,0%	73,1%	0,9%	0,0%	17,8%	1,1%	7,0%
France	34,3%	1,6%	0,5%	4,7%	47,5%	1,7%	9,7%
Germany	25,6%	29,3%	1,4%	3,7%	27,6%	1,9%	10,5%
Great Britain	7,9%	27,1%	0,0%	3,1%	48,7%	2,6%	10,6%
Greece	0,5%	0,4%	79,7%	1,3%	12,4%	0,7%	5,0%
Hungary	34,4%	10,6%	0,3%	0,0%	36,6%	0,4%	17,7%
Iceland	1,7%	74,9%	0,1%	0,0%	16,4%	2,7%	4,2%
Italy	73,7%	1,4%	0,1%	0,7%	17,2%	0,8%	6,1%
Latvia	17,5%	17,9%	13,6%	0,0%	28,2%	1,1%	21,6%
Lithuania	80,5%	1,0%	4,2%	0,0%	10,4%	0,1%	3,7%
Montenegro	2,5%	0,1%	52,5%	14,0%	6,1%	1,7%	23,1%
Netherlands	17,4%	15,5%	0,0%	2,8%	49,0%	3,0%	12,4%

North Macedonia	0,7%	0,4%	62,4%	26,9%	6,4%	0,2%	3,0%
Norway	2,8%	57,4%	0,9%	1,6%	31,5%	1,7%	4,2%
Poland	88,7%	0,6%	1,1%	0,0%	6,5%	0,6%	2,5%
Portugal	74,0%	2,5%	0,3%	0,4%	15,1%	2,1%	5,6%
Romania	5,4%	4,2%	86,1%	0,1%	1,5%	0,1%	2,7%
Serbia	1,3%	0,3%	59,3%	0,5%	14,7%	0,1%	23,8%
Slovakia	63,4%	10,0%	0,5%	0,0%	19,3%	0,4%	6,4%
Slovenia	56,6%	0,3%	2,5%	2,7%	24,7%	0,7%	12,5%
Spain	40,2%	0,4%	0,7%	1,8%	30,5%	21,2%	5,1%
Sweden	0,8%	60,8%	0,8%	0,7%	29,2%	0,4%	7,4%
Switzerland	34,3%	29,9%	1,1%	2,6%	23,9%	1,4%	6,8%
Ukraine	8,0%	1,9%	49,4%	0,2%	17,8%	1,7%	20,9%

Table 15: Majority religion per country

Country	Majority religion
Albania	Islam
Austria	Roman Catholicism
Bosnia and Herzegovina	Islam
Bulgaria	Eastern Orthodoxy
Croatia	Roman Catholicism
Czechia	Non-religious
Denmark	Protestantism
Estonia	Non-religious
Finland	Protestantism
France	Non-religious
Germany[4]	Non-religious*
Great Britain	Non-religious
Greece	Eastern Orthodoxy
Hungary[4]	Roman Catholicism*
Iceland	Protestantism
Italy	Roman Catholicism
Latvia	Non-religious
Lithuania	Roman Catholicism
Montenegro	Eastern Orthodoxy
Netherlands	Non-religious
North Macedonia	Eastern Orthodoxy
Norway	Protestantism
Poland	Roman Catholicism
Portugal	Roman Catholicism
Romania	Eastern Orthodoxy
Serbia	Eastern Orthodoxy
Slovakia	Roman Catholicism
Slovenia	Roman Catholicism
Spain	Roman Catholicism
Sweden	Protestantism
Switzerland	Roman Catholicism
Ukraine	Eastern Orthodoxy

[4] Germany and Hungary were too close in the data so their majority religion is determined using the following two sources: Germany - (Religionszugehörigkeiten, 2021), Hungary - (Hungarian Central Statistical Office, 2011)

Table 16: National Religiosity

Country	Ideological	Ritualistic	Consequential	Religiosity
Bosnia and Herzegovina	4,47	1,61	2,20	2,83
Georgia	2,93	1,54	3,17	2,58
Romania	1,94	2,78	2,16	2,53
Poland	3,02	2,56	1,26	2,51
Azerbaijan	4,20	0,70	2,82	2,51
Armenia	1,81	2,01	3,05	2,40
Montenegro	1,48	1,68	2,57	2,00
North Macedonia	1,43	1,29	1,52	1,50
Albania	-1,10	1,18	3,11	1,10
Croatia	0,80	0,85	0,79	0,88
Ukraine	0,49	0,79	0,69	0,72
Greece	1,35	1,08	-0,74	0,71
Lithuania	0,85	0,38	0,70	0,66
Slovakia	0,96	0,75	0,01	0,65
Portugal	0,05	0,53	1,04	0,57
Italy	0,43	0,94	-0,48	0,42
Serbia	-0,71	-0,01	1,14	0,11
Belarus	-0,42	-0,04	0,89	0,11
Bulgaria	-1,45	0,10	1,41	-0,01
Russia	-0,16	-0,53	0,55	-0,13
Hungary	-0,52	-0,75	0,15	-0,47
Austria	-0,33	-0,21	-1,13	-0,54
Latvia	-1,79	-0,84	0,49	-0,81
Spain	-0,62	-0,63	-1,78	-1,01
Slovenia	-1,35	-0,75	-1,03	-1,08
Switzerland	-0,72	-0,94	-1,77	-1,19
Finland	-1,22	-0,73	-1,89	-1,29
Great Britain	-0,84	-1,40	-1,75	-1,43
Estonia	-2,00	-1,81	0,05	-1,45
Germany	-1,50	-0,98	-1,78	-1,46
Iceland	-0,48	-1,36	-2,93	-1,64
France	-1,11	-1,84	-1,92	-1,77
Norway	-1,43	-1,25	-2,54	-1,78
Netherlands	-1,66	-1,39	-2,57	-1,93
Czechia	-2,40	-2,06	-1,14	-2,05
Sweden	-1,93	-1,87	-2,88	-2,33
Denmark	-2,48	-1,35	-3,42	-2,43

Table 17: Cronbach Alpha's religiosity

Variable	Ideological	Ritualistic	Consequential	Religiosity
National Religiosity	0.9001	0.8480	0.9646	0.8895
Individual Religiosity	0.8105	0.7464	0.8035	0.7105

8.2 Main Results: Religious Population

Table 18: Regression results Employment (Religious population) - Full

VARIABLES	Employment Roman Catholics	Employment Protestants	Employment Eastern Orthodox	Employment Muslims	Employment Non-religious
Catholic	0.332**				
	(0.160)				
Protestant		-0.0618			
		(0.462)			
Orthodox			2.310***		
			(0.266)		
Islam				-1.039***	
				(0.250)	
Nonreligious					1.292***
					(0.225)
IndividualReligiosity	-0.0924**	-0.180**	-0.0469	-0.103**	0.00607
	(0.0371)	(0.0783)	(0.0517)	(0.0482)	(0.0472)
Sex	-0.277***	0.0635	0.0380	-0.655***	-0.107
	(0.0844)	(0.178)	(0.103)	(0.103)	(0.0711)
Age	0.0195***	0.0217***	0.0131***	0.0185***	0.0144***
	(0.00325)	(0.00650)	(0.00378)	(0.00399)	(0.00269)
OriginRespondent	0.314	-0.0180	-0.00133	0.293	0.183
	(0.210)	(0.385)	(0.310)	(0.271)	(0.173)
OriginParents	-0.0259	0.531*	-0.366*	-0.227	0.204
	(0.169)	(0.304)	(0.217)	(0.274)	(0.126)
EducationLow	-0.660***	-0.723***	-0.812***	-0.650***	-0.826***
	(0.0950)	(0.217)	(0.119)	(0.113)	(0.0818)
EducationHigh	0.643***	0.528**	0.593***	1.293***	0.586***
	(0.116)	(0.233)	(0.129)	(0.156)	(0.0930)
GDPpercapita	2.56e-05***	1.91e-05***	6.30e-05***	1.39e-05**	2.04e-05***
	(3.13e-06)	(5.78e-06)	(1.07e-05)	(6.03e-06)	(1.68e-06)
Constant	0.382	0.715	-0.220	0.410	0.456**
	(0.261)	(0.470)	(0.387)	(0.376)	(0.203)
Observations	6,348	3,371	3,263	1,937	11,701

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 19: Regression results Long-term Unemployment (Religious population) - Full

VARIABLES	Long-term Unemployment Roman Catholics	Long-term Unemployment Protestants	Long-term Unemployment Eastern Orthodox	Long-term Unemployment Muslims	Long-term Unemployment Non-religious
Catholic	-0.184				
	(0.131)				
Protestant		0.383			
		(0.269)			
Orthodox			-2.098***		
			(0.216)		
Islam				1.592***	
				(0.240)	
Nonreligious					-1.050***
					(0.156)
IndividualReligiosity	0.0329	0.0704	-0.119***	-0.0401	-0.0688**
	(0.0289)	(0.0487)	(0.0408)	(0.0453)	(0.0339)
Sex	0.226***	0.163	-0.0742	0.208**	0.0767
	(0.0657)	(0.111)	(0.0825)	(0.0982)	(0.0487)

Age	-0.0312***	-0.0302***	-0.0268***	-0.0252***	-0.0276***
	(0.00262)	(0.00407)	(0.00315)	(0.00395)	(0.00192)
OriginRespondent	-0.446***	-0.527**	-0.178	-0.231	-0.156
	(0.160)	(0.235)	(0.227)	(0.228)	(0.113)
OriginParents	0.00180	-0.328*	0.191	0.144	-0.320***
	(0.131)	(0.197)	(0.164)	(0.243)	(0.0832)
EducationLow	0.681***	0.118	0.536***	0.656***	0.524***
	(0.0771)	(0.143)	(0.105)	(0.113)	(0.0610)
EducationHigh	-0.324***	-0.414***	-0.192**	-0.613***	-0.298***
	(0.0832)	(0.130)	(0.0942)	(0.130)	(0.0580)
GDPpercapita	-1.70e-05***	-1.51e-05***	-4.31e-05***	-3.33e-06	-1.44e-05***
	(2.17e-06)	(3.46e-06)	(6.81e-06)	(4.89e-06)	(1.09e-06)
Constant	0.730***	0.910***	1.824***	0.383	0.893***
	(0.206)	(0.296)	(0.297)	(0.338)	(0.142)
Observations	6,314	3,359	3,182	1,911	11,639
R-squared	0.108	0.160	0.062	0.163	0.122

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 20: Regression results Income (Religious population) - Full

VARIABLES	Income Roman Catholics	Income Protestants	Income Eastern Orthodox	Income Muslims	Income Non-religious
Catholic	0.494***				
	(0.152)				
Protestant		2.184***			
		(0.216)			
Orthodox			-0.465**		
			(0.220)		
Islam				-0.467*	
				(0.258)	
Nonreligious					-0.257
					(0.167)
IndividualReligiosity	-0.127***	-0.248***	-0.0619	-0.0663	-0.376***
	(0.0326)	(0.0426)	(0.0427)	(0.0518)	(0.0360)
Sex	-0.248***	-0.510***	-0.277***	-0.0541	-0.413***
	(0.0717)	(0.0883)	(0.0873)	(0.109)	(0.0510)
Age	-0.00713**	0.00970***	-0.00820**	-0.00681	0.0191***
	(0.00303)	(0.00373)	(0.00341)	(0.00450)	(0.00209)
OriginRespondent	0.240	0.0706	0.282	1.426***	0.131
	(0.191)	(0.239)	(0.239)	(0.286)	(0.123)
OriginParents	-0.0688	-0.0649	-0.126	-0.379	0.370***
	(0.147)	(0.184)	(0.187)	(0.309)	(0.0899)
EducationLow	-0.551***	-0.428***	-0.487***	-0.991***	-0.451***
	(0.0921)	(0.129)	(0.112)	(0.125)	(0.0719)
EducationHigh	1.436***	1.176***	0.856***	1.341***	1.413***
	(0.0824)	(0.113)	(0.0976)	(0.151)	(0.0587)
GDPpercapita	-6.26e-06***	-4.74e-06*	-4.32e-06	-2.07e-06	1.91e-06*
	(1.92e-06)	(2.75e-06)	(5.64e-06)	(5.81e-06)	(1.07e-06)
Constant	5.726***	4.869***	5.742***	4.405***	3.971***
	(0.238)	(0.297)	(0.306)	(0.405)	(0.159)
Observations	4,995	3,146	2,802	1,736	10,345
R-squared	0.108	0.160	0.062	0.163	0.122

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

8.3 Main Results: National Religiosity

Table 21: Regression results minority religion (National religiosity) - Full

VARIABLES	Not Catholic in Catholic countries			Not Protestant in Protestant countries			Not Orthodox in Orthodox countries		
	Employment	LongUnemployed	Income	Employment	LongUnemployed	Income	Employment	LongUnemployed	Income
National Religiosity	-0.0534	0.0237	0.129**	-0.105	0.0479	-0.438***	0.235***	-0.260***	-0.166**
	(0.0695)	(0.0532)	(0.0632)	(0.230)	(0.136)	(0.117)	(0.0816)	(0.0674)	(0.0724)
Individual Religiosity	-0.0149	-0.0334	-0.110***	-0.159	0.0439	-0.294***	-0.150***	0.0442	-0.197***
	(0.0493)	(0.0363)	(0.0390)	(0.132)	(0.0758)	(0.0673)	(0.0515)	(0.0425)	(0.0475)
Sex	0.0347	-0.0298	-0.357***	-0.409**	0.0249	-0.397***	-0.364***	0.0293	-0.206*
	(0.108)	(0.0774)	(0.0835)	(0.199)	(0.109)	(0.0917)	(0.134)	(0.110)	(0.121)
Age	0.0162***	-0.0257***	0.0110***	0.0325***	-0.0436***	0.0396***	0.0159***	-0.0240***	-0.0111**
	(0.00424)	(0.00315)	(0.00337)	(0.00747)	(0.00432)	(0.00348)	(0.00500)	(0.00425)	(0.00458)
Origin Respondent	0.262	-0.126	0.439***	0.122	0.124	0.429**	-0.693	-0.478	-0.947**
	(0.222)	(0.151)	(0.162)	(0.457)	(0.239)	(0.217)	(0.512)	(0.369)	(0.426)
Origin Parents	0.246	-0.425***	-0.0191	0.00320	-0.343*	0.206	0.623**	-0.180	-0.0138
	(0.191)	(0.128)	(0.133)	(0.384)	(0.197)	(0.184)	(0.263)	(0.227)	(0.263)
Education Low	-1.044***	0.751***	-0.781***	-0.504**	0.134	-0.334**	-1.021***	0.728***	-0.965***
	(0.123)	(0.0948)	(0.114)	(0.252)	(0.150)	(0.138)	(0.158)	(0.145)	(0.168)
Education High	0.478***	-0.206**	1.616***	0.866***	-0.397***	0.933***	0.787***	-0.313**	1.132***
	(0.149)	(0.0935)	(0.0947)	(0.254)	(0.132)	(0.116)	(0.170)	(0.126)	(0.135)
GDP percapita	1.34e-05***	-1.11e-05***	-4.50e-06**	4.12e-05***	-8.88e-06*	-4.73e-05***			
	(2.83e-06)	(1.93e-06)	(1.99e-06)	(1.01e-05)	(5.16e-06)	(4.33e-06)			
Constant	0.801***	0.493**	4.625***	-1.323	1.149**	6.152***	0.928*	1.111***	6.697***
	(0.270)	(0.198)	(0.220)	(0.960)	(0.557)	(0.482)	(0.537)	(0.398)	(0.448)
Observations	4,479	4,454	3,680	2,852	2,847	2,767	1,626	1,584	1,371
R-squared			0.135			0.177			0.161

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 22: Regression results majority religion (National religiosity) - Full

VARIABLES	Catholic in Catholic countries			Protestant in Protestant countries			Orthodox in Orthodox countries		
	Employment	LongUnemployed	Income	Employment	LongUnemployed	Income	Employment	LongUnemployed	Income
National Religiosity	0.0352	-0.00519	-0.0861*	-0.575**	0.0935	-0.505***	0.230***	-0.370***	-0.0944*
	(0.0588)	(0.0461)	(0.0514)	(0.292)	(0.176)	(0.135)	(0.0632)	(0.0509)	(0.0519)
Individual Religiosity	-0.0490	-0.00718	-0.0481	0.0114	0.0458	-0.258***	-0.0483	-0.0926*	-3.99e-05
	(0.0428)	(0.0334)	(0.0369)	(0.129)	(0.0739)	(0.0550)	(0.0606)	(0.0474)	(0.0489)
Sex	-0.329***	0.252***	-0.292***	-0.205	0.183	-0.546***	0.198*	-0.0989	-0.328***
	(0.0963)	(0.0741)	(0.0812)	(0.257)	(0.149)	(0.106)	(0.116)	(0.0919)	(0.0962)
Age	0.0202***	-0.0322***	-0.0103***	0.0330***	-0.0363***	0.0172***	0.0113***	-0.0272***	-0.00844**
	(0.00375)	(0.00299)	(0.00328)	(0.00879)	(0.00538)	(0.00409)	(0.00428)	(0.00354)	(0.00362)
Origin Respondent	0.446*	-0.434**	-0.163	0.789	-0.736*	0.0499	0.415	-0.300	-0.382
	(0.239)	(0.186)	(0.212)	(0.625)	(0.383)	(0.332)	(0.424)	(0.332)	(0.350)
Origin Parents	-0.0323	-0.0358	-0.0764	0.189	0.0205	0.124	-0.248	-0.117	-0.444**
	(0.195)	(0.150)	(0.159)	(0.537)	(0.323)	(0.252)	(0.284)	(0.208)	(0.219)
Education Low	-0.666***	0.708***	-0.557***	-0.430	0.0542	-0.250	-0.806***	0.620***	-0.515***
	(0.109)	(0.0877)	(0.101)	(0.360)	(0.215)	(0.164)	(0.136)	(0.120)	(0.127)
Education High	0.561***	-0.195**	1.446***	0.404	-0.293	1.094***	0.485***	-0.130	0.721***
	(0.133)	(0.0941)	(0.0959)	(0.334)	(0.193)	(0.148)	(0.143)	(0.104)	(0.107)
GDP percapita	1.86e-05***	-1.25e-05***	-1.60e-05***	3.68e-05***	-2.60e-05***	-3.05e-05***			
	(4.09e-06)	(2.86e-06)	(2.68e-06)	(1.34e-05)	(7.92e-06)	(5.73e-06)			
Constant	0.655**	0.509**	6.885***	-2.490**	2.192***	6.589***	0.915**	0.994***	6.539***
	(0.301)	(0.235)	(0.269)	(1.180)	(0.761)	(0.617)	(0.424)	(0.341)	(0.364)
Observations	5,068	5,041	3,853	2,070	2,068	1,994	2,668	2,595	2,251
R-squared			0.114			0.123			0.057

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 23: Regression results Muslims in Christian countries - Full

VARIABLES	Employment	LongUnemployed	Income
NationalReligiosity	-0.254*	-0.0157	0.0674
	(0.132)	(0.114)	(0.127)
IndividualReligiosity	-0.00545	-0.0568	-0.161*
	(0.0924)	(0.0810)	(0.0892)
Sex	-0.519***	-0.215	-0.278
	(0.196)	(0.175)	(0.198)
Age	0.0115	-0.0167**	-0.0109
	(0.00727)	(0.00672)	(0.00761)
OriginRespondent	-0.0790	-0.249	1.025***
	(0.405)	(0.346)	(0.393)
OriginParents	-0.0313	0.502	-0.590
	(0.390)	(0.356)	(0.422)
EducationLow	-0.993***	0.749***	-1.381***
	(0.220)	(0.204)	(0.232)
EducationHigh	0.887***	0.0238	0.534**
	(0.303)	(0.233)	(0.263)
GDPpercapita	6.34e-06	-5.32e-06	-2.58e-06
	(8.14e-06)	(6.48e-06)	(7.07e-06)
Constant	1.059*	0.264	5.318***
	(0.563)	(0.484)	(0.550)
Observations	595	580	485
R-squared			0.163

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 24: Regression results Christians and Non-religious people - Full

VARIABLES	Non-religious in Christian country			Christian in Non-religious country		
	Employment	Long Unemployed	Income	Employment	Long Unemployed	Income
NationalReligiosity	-0.0103	-0.0340	-0.559***			
	(0.0491)	(0.0342)	(0.0354)			
IndividualReligiosity				-0.173**	0.0422	-0.392***
				(0.0687)	(0.0428)	(0.0369)
Sex	-0.154*	0.0222	-0.449***	-0.0167	0.135	-0.542***
	(0.0891)	(0.0608)	(0.0618)	(0.171)	(0.105)	(0.0873)
Age	0.0175***	-0.0312***	0.0211***	0.0241***	-0.0304***	0.00910***
	(0.00342)	(0.00242)	(0.00241)	(0.00628)	(0.00390)	(0.00337)
OriginRespondent	0.196	-0.00903	0.326**	-0.105	-0.545***	0.239
	(0.221)	(0.141)	(0.144)	(0.341)	(0.203)	(0.201)
OriginParents	0.238	-0.385***	0.232**	0.390	-0.159	0.163
	(0.170)	(0.108)	(0.112)	(0.257)	(0.168)	(0.153)
EducationLow	-0.771***	0.491***	-0.481***	-0.769***	0.110	-0.180
	(0.102)	(0.0767)	(0.0861)	(0.205)	(0.135)	(0.122)
EducationHigh	0.651***	-0.285***	1.421***	0.531**	-0.401***	1.385***
	(0.115)	(0.0711)	(0.0709)	(0.222)	(0.122)	(0.105)
GDPpercapita	2.25e-05***	-1.56e-05***	-1.30e-05***	1.70e-05***	-1.27e-05***	1.20e-05***
	(2.59e-06)	(1.64e-06)	(1.58e-06)	(4.02e-06)	(2.49e-06)	(2.25e-06)
Constant	0.500**	0.878***	4.544***	0.967**	0.878***	4.562***
	(0.251)	(0.171)	(0.175)	(0.431)	(0.265)	(0.257)
Observations	7,478	7,435	6,579	3,569	3,555	3,317
R-squared			0.152			0.144

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

8.4 Robustness checks

8.4.1 Income Dummy

Table 25: Robustness check Income Dummy - Full

VARIABLES	IncomeDummy Roman Catholics	IncomeDummy Protestants	IncomeDummy Eastern Orthodox	IncomeDummy Muslims	IncomeDummy Non-religious
Catholic	0.491***				
	(0.145)				
Protestant		0.822***			
		(0.218)			
Orthodox			-0.833***		
			(0.226)		
Islam				-0.455	
				(0.311)	
Nonreligious					-1.395***
					(0.176)
NationalReligiosity	-0.0788**	-0.501***	0.00734	0.392***	-0.385***
	(0.0366)	(0.0786)	(0.0421)	(0.0659)	(0.0308)
IndividualReligiosity	-0.0595**	-0.179***	-0.0439	-0.142**	-0.192***
	(0.0281)	(0.0362)	(0.0428)	(0.0563)	(0.0314)
Sex	-0.122**	-0.406***	-0.199**	-0.0726	-0.255***
	(0.0608)	(0.0793)	(0.0861)	(0.122)	(0.0421)
Age	-0.00657***	0.00401	-0.00777**	0.00511	0.0107***
	(0.00243)	(0.00305)	(0.00323)	(0.00485)	(0.00165)
OriginRespondent	0.184	-0.0812	0.275	1.372***	0.0121
	(0.150)	(0.199)	(0.231)	(0.291)	(0.0994)
OriginParents	-0.0392	0.0696	-0.315*	-0.897***	0.222***
	(0.116)	(0.155)	(0.163)	(0.293)	(0.0735)
EducationLow	-0.340***	-0.274**	-0.287**	-0.720***	-0.238***
	(0.0776)	(0.112)	(0.121)	(0.154)	(0.0580)
EducationHigh	0.929***	0.822***	0.705***	1.241***	0.929***
	(0.0699)	(0.0968)	(0.0941)	(0.143)	(0.0482)
GDPpercapita	-6.27e-06***	-7.74e-06***	-1.21e-05**	1.40e-05**	-8.34e-06***
	(1.98e-06)	(2.47e-06)	(5.59e-06)	(6.49e-06)	(1.20e-06)
Constant	-0.373*	-0.956***	-0.00286	-2.245***	-0.908***
	(0.197)	(0.256)	(0.302)	(0.459)	(0.139)
Observations	4,995	3,146	2,802	1,736	10,345

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

8.4.2 Christian and Christian Dummy

Table 26: Robustness check Christian and Christian Dummy - Full

VARIABLES	(1) Employment	(2) LongUnemployed	(3) Income	(4) Employment	(6) LongUnemployed	(7) Income
Christian	1.279***	-0.965***	0.743***			
	(0.160)	(0.126)	(0.137)			
ChristianDummy				0.373***	-0.160***	0.141**
				(0.0745)	(0.0585)	(0.0603)
IndividualReligiosity	-0.0947***	-0.00885	-0.205***	-0.0808***	-0.0157	-0.204***
	(0.0275)	(0.0206)	(0.0212)	(0.0274)	(0.0206)	(0.0212)
Sex	-0.125**	0.123***	-0.302***	-0.134**	0.131***	-0.307***
	(0.0608)	(0.0462)	(0.0477)	(0.0607)	(0.0461)	(0.0477)
Age	0.0172***	-0.0292***	-0.000383	0.0168***	-0.0288***	-0.000566
	(0.00228)	(0.00179)	(0.00185)	(0.00227)	(0.00178)	(0.00186)
OriginRespondent	0.172	-0.384***	0.341***	0.224	-0.419***	0.365***
	(0.157)	(0.113)	(0.120)	(0.156)	(0.112)	(0.120)
OriginParents	-0.0351	-0.0714	0.0772	-0.00631	-0.115	0.109
	(0.120)	(0.0890)	(0.0911)	(0.120)	(0.0889)	(0.0910)
EducationLow	-0.741***	0.558***	-0.323***	-0.708***	0.531***	-0.304***
	(0.0689)	(0.0556)	(0.0612)	(0.0685)	(0.0553)	(0.0612)
EducationHigh	0.593***	-0.263***	1.320***	0.592***	-0.265***	1.325***
	(0.0799)	(0.0553)	(0.0551)	(0.0798)	(0.0552)	(0.0552)
GDPpercapita	2.62e-05***	-1.91e-05***	8.24e-06***	2.78e-05***	-1.98e-05***	8.63e-06***
	(1.78e-06)	(1.17e-06)	(1.02e-06)	(1.81e-06)	(1.17e-06)	(1.02e-06)
Constant	-0.0404	1.397***	4.536***	0.382**	0.975***	4.852***
	(0.191)	(0.145)	(0.156)	(0.179)	(0.133)	(0.142)
Observations	12,982	12,855	10,943	12,982	12,855	10,943
R-squared			0.111			0.109

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

8.4.3 Individual Religiosity All Religions

Table 27: Robustness check Individual religiosity all religions - Full

VARIABLES	Employment	LongUnemployed	Income
IndividualReligiosity	-0.111***	0.000757	-0.201***
	(0.0230)	(0.0182)	(0.0195)
Sex	-0.224***	0.113***	-0.254***
	(0.0506)	(0.0407)	(0.0440)
Age	0.0189***	-0.0290***	-0.000746
	(0.00190)	(0.00159)	(0.00170)
OriginRespondent	0.370***	-0.457***	0.646***
	(0.133)	(0.100)	(0.109)
OriginParents	0.0294	-0.137*	0.122
	(0.104)	(0.0802)	(0.0844)
EducationLow	-0.705***	0.567***	-0.439***
	(0.0562)	(0.0482)	(0.0554)
EducationHigh	0.818***	-0.377***	1.350***
	(0.0694)	(0.0499)	(0.0516)
GDPpercapita	3.50e-05***	-2.46e-05***	1.07e-05***
	(1.68e-06)	(1.10e-06)	(9.56e-07)
Constant	0.0609	1.206***	4.552***
	(0.143)	(0.112)	(0.122)
Observations	14,919	14,766	12,679
R-squared			0.126

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

8.4.4 Country Dummies

France is omitted in all regressions in this section. O = Omitted by Stata

Table 28: Robustness check Country dummies Employment - Full

VARIABLES	Employment Roman Catholics	Employment Protestants	Employment Eastern Orthodox	Employment Muslims	Employment Non-religious
Catholic	-1.648				
	(2.324)				
Protestant		8.357			
		(6.368)			
Orthodox			6.820		
			(8.544)		
Islam				-49.20*	
				(26.89)	
Nonreligious					-1.434**
					(0.696)
IndividualReligiosity	-0.0576	-0.0775	0.00850	-0.0878*	-0.0337
	(0.0401)	(0.0871)	(0.0550)	(0.0519)	(0.0504)
Sex	-0.330***	-0.0154	-0.0245	-0.652***	-0.0729
	(0.0880)	(0.186)	(0.106)	(0.104)	(0.0723)
Age	0.0161***	0.0160**	0.0115***	0.0184***	0.0156***
	(0.00340)	(0.00676)	(0.00388)	(0.00404)	(0.00277)
OriginRespondent	0.196	-0.171	-0.221	0.588**	0.0979
	(0.212)	(0.424)	(0.344)	(0.297)	(0.176)
OriginParents	0.0467	0.653**	-0.135	-0.116	0.164
	(0.174)	(0.324)	(0.227)	(0.306)	(0.129)
EducationLow	-0.474***	-0.747***	-0.854***	-0.679***	-0.778***
	(0.105)	(0.245)	(0.130)	(0.116)	(0.0891)
EducationHigh	0.630***	0.487**	0.477***	1.283***	0.646***
	(0.123)	(0.246)	(0.133)	(0.159)	(0.0966)
GDPpercapita	2.84e-05***	-9.32e-06	8.15e-05	1.13e-05	1.90e-05***
	(8.77e-06)	(2.70e-05)	(0.000129)	(1.55e-05)	(3.27e-06)
Albania	-1.248***	-1.895*	1.340	34.71*	-0.849*
	(0.387)	(1.084)	(3.405)	(19.14)	(0.444)
Austria	1.628*	0.660	-0.595	-0.489	0.216
	(0.848)	(1.088)	(2.437)	(0.438)	(0.262)
Bosnia	-0.972***	O	0.185	23.52*	-1.368***
	(0.309)		(1.597)	(12.96)	(0.385)
Bulgaria	-1.515*	O	-0.878	4.326*	-0.0525
	(0.783)		(1.553)	(2.278)	(0.264)
Croatia	0.702	-0.407	2.139	-2.293	-0.495
	(1.389)	(1.336)	(2.878)	(1.900)	(0.312)
Czechia	0.759**	-0.123	1.887	O	2.104***
	(0.382)	(0.963)	(1.937)		(0.287)
Denmark	O	-4.873	O	-0.856	0.0856
		(3.894)		(1.385)	(0.253)
Estonia	O	-0.106	2.367**	O	1.156***
		(0.913)	(1.108)		(0.276)
Finland	O	-5.601	-2.411	O	-0.280
		(3.738)	(2.280)		(0.275)
Germany	1.290***	-0.186	0.151	0.154	0.153
	(0.486)	(1.143)	(2.140)	(0.472)	(0.198)
Great Britain	0.0941	-0.735	O	0.0159	0.371**
	(0.702)	(1.129)		(0.627)	(0.186)
Hungary	1.510***	0.796	O	O	1.623***
	(0.532)	(1.088)			(0.273)
Iceland	-0.855	-3.842	O	O	0.915***
	(1.343)	(3.261)			(0.344)
Italy	0.400	-1.214	O	-1.564	-0.431*
	(1.165)	(0.831)		(1.261)	(0.235)
Latvia	O	-0.569	1.613	O	0.560**
		(1.234)	(1.288)		(0.261)
Lithuania	1.628	O	3.259	O	-0.326
	(1.437)		(2.120)		(0.336)

Montenegro	-0.0115		-1.626	4.375*	-0.809*
	(0.756)		(1.026)	(2.450)	(0.433)
Netherlands	-0.628	-0.138	O	-0.444	0.754***
	(0.451)	(0.479)		(0.606)	(0.212)
North Macedonia	O	-0.727	-1.102	10.92*	-0.701*
		(1.372)	(1.510)	(5.864)	(0.371)
Norway	O	-2.640	O	-1.300	0.645**
		(2.008)		(1.025)	(0.327)
Poland	1.955	-0.237	2.435	O	1.191**
	(1.653)	(1.240)	(2.796)		(0.528)
Portugal	0.901	-0.960	O	-0.992	-0.516*
	(1.252)	(0.725)		(1.697)	(0.274)
Romania	O	1.336	-1.889	O	0.990**
		(1.218)	(4.335)		(0.491)
Serbia	0.588	O	-1.347	-2.125	-0.346
	(1.132)		(1.390)	(1.742)	(0.295)
Slovakia	1.431	-0.217	O	O	-0.109
	(1.048)	(0.834)			(0.258)
Slovenia	1.069	O	0.970	1.033	0.0212
	(0.857)		(1.339)	(1.006)	(0.280)
Spain	0.194	-1.037	O	O	-0.344**
	(0.489)	(1.558)			(0.175)
Sweden	O	-1.930	O	O	0.633**
		(3.018)			(0.262)
Constant	0.815*	1.041	-1.848	2.161	1.009***
	(0.488)	(0.895)	(4.578)	(1.623)	(0.370)
Observations	6,188	3,354	3,224	1,925	11,701

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
O = Omitted

Table 29: Robustness check Country dummies Long-term Unemployment - Full

VARIABLES	Long-term Unemployment Roman Catholics	Long-term Unemployment Protestants	Long-term Unemployment Eastern Orthodox	Long-term Unemployment Muslims	Long-term Unemployment Non-religious
Catholic	0.719				
	(1.716)				
Protestant		-6.141			
		(5.141)			
Orthodox			-4.633		
			(3.079)		
Islam				1.577	
				(22.05)	
Nonreligious					-0.151
					(0.487)
IndividualReligiosity	0.0171	0.0486	-0.111**	-0.0211	-0.0560
	(0.0312)	(0.0527)	(0.0434)	(0.0493)	(0.0365)
Sex	0.274***	0.190*	-0.0440	0.243**	0.0725
	(0.0680)	(0.113)	(0.0845)	(0.101)	(0.0494)
Age	-0.0295***	-0.0280***	-0.0266***	-0.0275***	-0.0279***
	(0.00270)	(0.00417)	(0.00325)	(0.00406)	(0.00195)
OriginRespondent	-0.389**	-0.451*	-0.172	-0.396	-0.148
	(0.163)	(0.245)	(0.242)	(0.248)	(0.114)
OriginParents	0.00982	-0.346*	0.0854	0.152	-0.297***
	(0.135)	(0.206)	(0.171)	(0.281)	(0.0851)
EducationLow	0.551***	0.0727	0.488***	0.625***	0.425***
	(0.0837)	(0.154)	(0.113)	(0.117)	(0.0652)
EducationHigh	-0.369***	-0.408***	-0.241**	-0.702***	-0.417***
	(0.0879)	(0.136)	(0.0984)	(0.137)	(0.0607)
GDPpercapita	-1.44e-05***	2.18e-06	-3.19e-05	-2.28e-05**	-1.97e-05***
	(5.53e-06)	(2.16e-05)	(2.17e-05)	(1.12e-05)	(2.07e-06)
Albania	1.825***	2.000	-0.893	-1.115	1.043***

	(0.377)	(1.222)	(1.319)	(15.68)	(0.364)
Austria	-1.047*	-0.961	-0.632	-0.568	-0.711***
	(0.619)	(0.836)	(0.772)	(0.396)	(0.174)
Bosnia	0.571**	O	-0.542	-1.624	0.257
	(0.270)		(0.661)	(10.61)	(0.310)
Bulgaria	0.795	O	-0.0952	-1.146	-0.536***
	(0.742)		(0.432)	(1.853)	(0.195)
Croatia	-0.216	1.337	-1.582	-1.181	0.109
	(1.009)	(1.253)	(1.609)	(1.693)	(0.236)
Czechia	-0.422	-0.532	-3.573**	O	-1.285***
	(0.274)	(0.806)	(1.520)		(0.176)
Denmark	O	3.565	O	0.975	-0.0969
		(3.092)		(1.030)	(0.152)
Estonia	O	-0.290	-1.980**	-0.338	-0.605***
		(0.623)	(0.842)	(1.787)	(0.188)
Finland	O	3.619	-0.108	O	-0.146
		(2.981)	(1.118)		(0.180)
Germany	-1.116***	0.208	-1.437*	-0.923**	-0.637***
	(0.288)	(0.824)	(0.846)	(0.406)	(0.139)
Great Britain	-0.185	0.116	O	-1.464***	-0.386***
	(0.480)	(0.833)		(0.568)	(0.139)
Hungary	-0.938**	-0.340	-1.853	O	-0.941***
	(0.369)	(0.705)	(1.748)		(0.157)
Iceland	0.283	2.804	O	O	0.0339
	(0.878)	(2.570)			(0.154)
Italy	-0.307	0.340	-1.934	-0.775	-0.423**
	(0.860)	(0.750)	(1.523)	(1.102)	(0.179)
Latvia	-1.262***	-0.276	-1.360	O	-0.848***
	(0.410)	(0.943)	(0.837)		(0.183)
Lithuania	-0.637	O	-2.471**	O	-0.142
	(1.045)		(1.174)		(0.243)
Montenegro	-0.0420	O	0.270	-1.446	-0.178
	(0.625)		(0.278)	(1.994)	(0.369)
Netherlands	0.351	-0.579*	O	-0.492	-0.381***
	(0.319)	(0.351)		(0.484)	(0.141)
North Macedonia	O	-0.857	0.503	-0.924	-0.189
		(1.282)	(0.492)	(4.789)	(0.283)
Norway	-0.945	1.639	-0.842	0.642	-0.140
	(1.198)	(1.536)	(1.243)	(0.780)	(0.164)
Poland	-0.822	-1.233	-1.479	O	-0.630**
	(1.202)	(1.191)	(1.457)		(0.275)
Portugal	-0.525	-0.294	O	-2.029	-0.408*
	(0.916)	(0.648)		(1.546)	(0.214)
Romania	-2.122**	-0.865	0.334	O	-1.435***
	(1.072)	(0.711)	(1.339)		(0.328)
Serbia	1.563**	0.0885	0.729*	0.357	-0.0596
	(0.736)	(1.602)	(0.419)	(1.516)	(0.216)
Slovakia	-0.924	-0.545	-2.201	O	-0.666***
	(0.761)	(0.633)	(1.648)		(0.200)
Slovenia	-0.258	0.313	-1.864*	-1.898**	-0.547***
	(0.620)	(1.527)	(1.118)	(0.775)	(0.207)
Spain	-0.104	-0.317	-3.019**	-0.333	0.0536
	(0.368)	(1.512)	(1.464)	(0.949)	(0.133)
Sweden	0.236	1.886	O	-1.563	-0.663***
	(1.259)	(2.274)		(1.350)	(0.157)
Constant	0.451	1.386**	3.061*	2.044	1.292***
	(0.396)	(0.654)	(1.582)	(1.339)	(0.255)
Observations	6,307	3,346	3,173	1,910	11,639

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
O = Omitted

Table 30: Robustness check Country dummies Income - Full

VARIABLES	Income Roman Catholics	Income Protestants	Income Eastern Orthodox	Income Muslims	Income Non-religious
Catholic	0.314				
	(0.950)				
Protestant		4.522**			
		(1.900)			
Orthodox			1.254		
			(1.075)		
Islam				-0.433	
				(0.487)	
Nonreligious					-2.089***
					(0.569)
IndividualReligiosity	-0.0704**	-0.212***	-0.0519	-0.120**	-0.250***
	(0.0331)	(0.0417)	(0.0431)	(0.0526)	(0.0374)
Sex	-0.296***	-0.488***	-0.202**	-0.0890	-0.421***
	(0.0710)	(0.0874)	(0.0849)	(0.109)	(0.0491)
Age	-0.00516*	0.00902***	-0.00748**	-0.00387	0.0171***
	(0.00286)	(0.00339)	(0.00318)	(0.00430)	(0.00192)
OriginRespondent	0.265	0.0580	0.368	1.662***	0.127
	(0.175)	(0.223)	(0.240)	(0.273)	(0.116)
OriginParents	0.212	-0.00166	-0.282	-0.469	0.272***
	(0.137)	(0.174)	(0.174)	(0.323)	(0.0869)
EducationLow	-0.849***	-0.450***	-0.674***	-0.900***	-0.653***
	(0.0937)	(0.130)	(0.115)	(0.126)	(0.0705)
EducationHigh	1.205***	1.138***	0.876***	1.451***	1.247***
	(0.0864)	(0.110)	(0.0973)	(0.148)	(0.0589)
GDPpercapita	-2.26e-05	-3.85e-05	2.02e-05	6.63e-05	2.56e-05***
	(2.02e-05)	(5.36e-05)	(3.04e-05)	(4.22e-05)	(6.25e-06)
Albania	-1.563	0.113	2.172	2.177	O
	(0.981)	(2.029)	(1.737)	(1.678)	
Austria	0.0798	1.160	0.642	-0.0141	-1.421***
	(0.520)	(1.113)	(0.831)	(0.557)	(0.150)
Bosnia	-0.484	O	2.309	3.061*	0.836*
	(0.883)		(1.686)	(1.651)	(0.460)
Bulgaria	-0.862	2.046	1.945	2.088	0.354
	(1.309)	(2.304)	(1.586)	(1.520)	(0.322)
Croatia	0.897***	1.320	3.604*	0.710	1.770***
	(0.183)	(1.757)	(1.897)	(1.798)	(0.351)
Czechia	0.530	1.006	2.798*	O	2.040***
	(0.538)	(1.216)	(1.485)		(0.193)
Denmark	O	O	O	O	O
Estonia	-3.837	0.461	1.420	-0.939	1.288***
	(2.530)	(1.104)	(1.236)	(2.414)	(0.203)
Finland	O	-0.666	2.237*		0.336**
		(0.540)	(1.178)		(0.163)
Germany	0.999***	0.985**	2.059**	0.263	-0.111
	(0.289)	(0.465)	(0.831)	(0.463)	(0.126)
Great Britain	0.131	0.576	O	-0.531	0.660***
	(0.435)	(0.478)		(0.535)	(0.144)
Greece	O	O	O	O	O
Hungary	-0.284	-0.138	3.916*	O	1.278***
	(0.524)	(1.394)	(2.064)		(0.244)
Iceland	0.308	0.341	2.691	O	-0.611***
	(0.868)	(0.788)	(2.313)		(0.171)
Italy	-0.603**	-0.527	0.766	1.080	-0.960***
	(0.282)	(0.945)	(1.554)	(0.943)	(0.220)
Latvia	-1.340**	-1.083	1.055	O	-0.413
	(0.663)	(1.399)	(1.367)		(0.259)
Lithuania		0.782	3.730***	O	0.437
		(1.355)	(1.378)		(0.342)
Montenegro	0.531	1.131	2.824*	2.846*	0.761
	(1.082)	(2.865)	(1.603)	(1.549)	(0.536)

Netherlands	1.066***	1.942**	O	-0.555	0.791***
	(0.361)	(0.857)		(0.603)	(0.158)
North Macedonia	O	0.00871	2.541	2.119	0.120
		(2.108)	(1.679)	(1.651)	(0.438)
Norway	0.519	0.221	O	-3.409*	-1.320***
	(0.918)	(1.515)		(1.809)	(0.244)
Poland	-0.539***	1.676	0.742	O	0.885**
	(0.168)	(1.753)	(1.636)		(0.374)
Portugal	O	O	O	O	O
Romania	-1.852*	-1.308	1.381	-1.288	-0.753*
	(1.020)	(1.567)	(1.502)	(2.619)	(0.397)
Serbia	0.471	O	2.501	1.859	1.201***
	(1.296)		(1.645)	(2.241)	(0.369)
Slovakia	-0.757***	-0.292	-0.0517	O	-0.697**
	(0.220)	(1.247)	(1.806)		(0.301)
Slovenia	0.0202	1.486	1.265	2.665***	0.559**
	(0.202)	(1.883)	(1.246)	(0.990)	(0.256)
Spain	-0.150	-1.894	0.0472	-0.0224	-0.333*
	(0.293)	(1.827)	(1.348)	(0.969)	(0.193)
Sweden	2.267**	1.181***	4.649***	0.637	1.452***
	(1.134)	(0.271)	(1.246)	(1.053)	(0.133)
Switzerland	1.088	1.844	-0.335	-2.450	-1.505***
	(0.962)	(2.164)	(1.194)	(1.782)	(0.230)
Ukraine	-1.097	-1.844	1.258	4.418**	-0.424
	(1.025)	(2.014)	(0.347)	(1.447)	(0.218)
Constant	6.130***	5.202**	4.119***	4.605***	6.293***
	(1.134)	(2.051)	(0.853)	(0.356)	(0.194)
Observations	4,995	3,146	3,947	1,761	10,833
R-squared	0.155	0.193	0.044	0.041	0.089

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

O = Omitted