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**The effect of uncertainty: Does
unemployment make people more
conservative in their views?**

TO WHAT EXTENT DO UNEMPLOYED PEOPLE CHANGE IN
THEIR POLITICAL AND SOCIAL CONSERVATISM?

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The views stated in this thesis are those of the author and not necessarily those of the supervisor, second assessor, Erasmus School of Economics or Erasmus University Rotterdam.

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Abstract

This study investigates the effect of being unemployed on the political and social conservatism of an individual. The effect of being unemployed is driven by the uncertain situation in which an unemployed person finds him or herself. Previous literature shows that uncertainty stimulates conservatism. Especially the COVID-19 crisis increased the interest into the change in political and social conservatism due to uncertainty. However, unemployment goes hand in hand with effects other than uncertainty, such as financial consequences, which complicates the interpretation of the results. The results in this paper are obtained with the use of the World Values Survey time-series dataset for the period 1981-2020, which contains survey questions related to conservatism. The regression analyses show significant effects of being unemployed on conservatism. For some questions, the association between being unemployed and conservatism is positive, for other questions the association is negative. However, one needs to be careful with interpreting the results, because of potential omitted variable bias.

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1 Introduction

Gender stereotypes that are deeply embedded in our society suppress the development of emancipation. These stereotypes can have negative economic consequences, such as low labour force participation among women and the gender wage gap. Hence, it is of great importance to investigate the determinants of such social conservatism. [Jost et al. \(2003\)](#) find that uncertainty may stimulate a preference for tradition, which relates to conservatism. Moreover, a high degree of uncertainty is generally found among unemployed people ([Mantler et al., 2005](#)), such that being unemployed could be an influencing factor of tradition and, thus, of conservatism. Therefore, this research will investigate the effect of being unemployed on the social and political conservatism of an individual.

In the past decades, there has been a shift in social conservatism. [Boring and Moroni \(2021\)](#) show that certain gender stereotypes have decreased in Europe over the past decades. While more and more men and women are operating in non-traditional fields, [Haines et al. \(2016\)](#) show that gender stereotypes still play an important role in the perception of people. Moreover, from the existing literature it follows that political ideology goes hand in hand with certain stereotypes ([Graham et al., 2012](#)). The underlying reason may be that political conservatism has traditions as a foundation. As said before, [Jost et al. \(2003\)](#) explain that uncertainty may stimulate a preference for tradition and, therefore, stimulate a preference for conservatism. In this way, uncertainty could have an increasing effect on conservatism. Consequently, the uncertainty that often follows from being unemployed could generate an association between being unemployed and conservatism.

While becoming unemployed has many obvious negative consequences, such as deterioration of mental health ([Nordenmark and Mattias, 1999](#)), the effect on the political and social conservatism of an individual is not immediately thought of. However, attention for the effect of being unemployed on conservatism could be of economic importance. It may, for example, provide insights into factors that influence emancipation. The possible stimulating effect of being unemployed on gender stereotypes may increase inequality in labour market opportunities. While female labour force participation has increased in many countries over the past decades, [Göksel \(2013\)](#) argues that this is not the case for all countries. [Göksel \(2013\)](#) shows that conservatism and social norms play an important role here. Therefore, investigating the determinants of conservatism could give valuable insights. Researching the effect of being unemployed on conservatism may then lead to important policy recommendations. Especially now that many people have lost their jobs and experience financial difficulties due to the COVID-19 crisis, it is important to investigate the effects of unemployment.

The current coronavirus pandemic has quickly led to an extreme global crisis. The fear of getting infected with the virus, lack of social contact and financial uncertainty have resulted in an increase in anxiety among many people ([Smith et al., 2020](#)). [Rosenfeld and Tomiyama \(2020\)](#) investigate the effect of the coronavirus pandemic on political preference and

traditional gender roles through a longitudinal study conducted in the United States. They find that participants of their survey became more conservative in their views towards men and women but did not change in their political views. While the pandemic itself causes a substantial amount of uncertainty and threat that may promote conservatism, it is also useful to investigate whether an increase in conservatism may be caused by becoming unemployed.

The study of [Rosenfeld and Tomiyama \(2020\)](#) uses two waves of surveys that are only three months apart. Hence, their short time frame may be the reason that there was no effect on the political ideology. For example, the second wave of their study may be recorded before many people became unemployed due to the coronavirus crisis, such that the uncertainty of being unemployed did not affect political preferences yet. Therefore, the current paper may contribute to the existing literature by using a time span of multiple decades. In this way, the effect of being unemployed on social and political conservatism can be measured more adequately. Next to this, the data that is used for the current paper contains more than 400,000 observations coming from a substantial number of countries from all over the world. This may ensure more accurate results and allow for analyses between groups of countries. While the amount of literature on the effect of being unemployed on conservatism is limited, [Roccatto et al. \(2013\)](#) find evidence that respondents coming from areas with high unemployment rates increased in their conservatism, while there was no such increase for respondents coming from areas with low unemployment rates. Again, the current paper may contribute to these findings by using a larger sample with respondents coming from different countries.

The current paper uses the World Values Survey (WVS) time-series dataset for the period 1981-2020. This survey includes questions related to conservatism. To measure the effect of unemployment on social and political conservatism, a multiple linear regression of conservatism on being unemployed is performed. For each regression, a different survey question related to conservatism is used as dependent variable. These questions include, among other things, political preference, the view on income inequality and several gender stereotypical statements. The regression analyses that are performed with this data show that the effect of being unemployed on conservatism is dependent on the type of survey question that is used as a measure for conservatism. For the regression of political conservatism on being unemployed, the regression analyses show significant negative results. For the survey questions related to social conservatism there is either a significant negative effect, a significant positive effect or no significant effect of being unemployed on conservatism. Differences between men and women are found for some of the regression analyses that measure social conservatism. However, one needs to be careful with interpreting the results, because of potential omitted variable bias. Moreover, the significant results that are found only show a small effect of being unemployed on conservatism, such that the results are not economically significant.

The rest of the paper is organized as follows. Chapter 2 provides an overview of the theoretical framework; Chapter 3 describes the empirical strategy and data; Chapter 4 discusses the results of the multiple linear regression analyses; Chapter 5 investigates the robustness of the

results; Chapter 6 provides a discussion and Chapter 7 concludes the findings of this research.

2 Theoretical Framework

In political matters, people talk about political parties as left and right. [Jost et al. \(2003\)](#) argue that this distinction is characterized by "the support versus the opposition of social change", and "the acceptance versus the rejection of inequality". Conservatism or "the political right" is generally related to the resistance to change and acceptance of inequality. [Jost et al. \(2009\)](#) explain that over time, some Western countries have experienced revolutionary actions that stimulated legal, economic and political equality. However, people who supported the political right were generally against these actions. [Jost et al. \(2003\)](#) argue that people are likely to support conservatism in order to respond to certain psychological needs. One of these needs is to reduce uncertainty, which may stimulate people to hold on to conservative ideologies ([Kruglanski, 1989](#)). Similarly, [Jost et al. \(2007\)](#) test the hypothesis that "uncertainty avoidance" may stimulate conservatism. Their structural equation models confirm this hypothesis.

As mentioned in the introduction, uncertainty and unemployment are closely related. [Mantler et al. \(2005\)](#) explain that the concept of employment uncertainty includes the stressful situation where unemployed people "cannot foresee if, or when, they will regain employment". From the research of [Jost et al. \(2007\)](#), it may be concluded that there is an association between uncertainty and conservatism. Hence, the relationship between uncertainty and conservatism, together with the relationship between being unemployed and uncertainty, could mean a positive effect of being unemployed on conservatism.

However, it is important to distinguish between political and social conservatism. Concerning political conservatism, being unemployed could stimulate a preference for the political right. As mentioned before, [Jost et al. \(2003\)](#) find that uncertainty stimulates people to hold on to traditions and to resist change, which are related to the political right. In this way, the uncertainty of being unemployed may stimulate political conservatism. However, [Wiertz and Rodon \(2019\)](#) find that becoming unemployed may result in a preference for the political left because of financial consequences. In this way, material motives can influence ideological preferences ([Margalit, 2013](#)). This means that becoming unemployed may stimulate the support of income equality and, therefore, the support of the political left ([Iversen and Soskice, 2001](#)). However, becoming unemployed may not only create a need for income equality, but also for job creation, which is more often on the political agenda of right-wing parties ([Lachat, 2014](#)). This would mean that becoming unemployed may trigger an increasing preference for the political right. Hence, being unemployed triggers different political interests: becoming unemployed increases the preference for income redistribution but also for job creation ([Wiertz and Rodon, 2019](#)). These two policy related aspects are often advocated by the two different ends of the political spectrum.

Conservatism does not only come in political forms. [Rosenfeld and Tomiyama \(2020\)](#), for example, estimate social conservatism by specifically looking at gender stereotypes and roles. Such conservative ideology may increase a need for "traditional gender role conformity"

(Makwana et al., 2018) through "disliking of ambiguity" (Jost et al., 2003). An example of an ambiguous situation is when there is a vague distinction between men and women (Budner, 1962). Rosenfeld and Tomiyama (2020) explain that the acceptance of gender ambiguity may have decreased due to the uncertainty of the COVID-19 crisis. This may result in a stimulation of more stereotypical gender roles. Moreover, Boring and Moroni (2021) conducted a survey during the COVID-19 crisis and find that people who experienced relatively high financial distress during the crisis shifted their views towards more unequal gender norms. This shows the possible relationship between being unemployed and social conservatism. As unemployed people find themselves in high economic uncertainty, it may be the case that this stimulates their gender stereotypes and, thus, their social conservatism. Boring and Moroni (2021) find that the effect between economic uncertainty and gender norms is mainly driven by men, which could also be an important influencing factor for the results of the current paper.

The effect of uncertainty on political and social conservatism is not that clear. On the one hand, Rosenfeld and Tomiyama (2020) show that participants of their survey analysis became more conservative in their views towards men and women, but did not change in their political views during the pandemic. On the other hand, Milojev et al. (2014) do find changes in political preferences as a result of the 2008 global financial crisis. They find that older people became more conservative, while this was not the case for younger people. Here, uncertainty could play a role again. Namely, the reason that Milojev et al. (2014) do not find a similar increase in conservatism among younger people, could be that younger people are not as much affected by the uncertainty that follows from a crisis. For example, younger people do not have to provide for themselves yet, such that they are not affected by the threat of becoming unemployed. From this previous literature it appears that uncertainty contributes to conservatism, at least in some form. Unemployment, which is almost always an inevitable result of a crisis, closely relates to this uncertainty.

Lastly, Algan et al. (2017) analyse the relationship between unemployment and "non-mainstream parties" as a result of the global financial crisis, by comparing regions that were differently affected by the crisis. They find that unemployment increases the support for populism. The distinction between conservatism and populism is important for the current research. While conservatism is associated with traditions and a resistance to change (Jost et al., 2003), populism is rather characterized by institutional distrust (Inglehart and Norris, 2016) and dissatisfaction with democracy (Algan et al., 2017). The effect of unemployment on either conservatism or populism can both have important economic consequences. On the one hand, a stimulating effect of unemployment on populism could, for example, have negative consequences for the European Union, such that certain trade benefits decrease. On the other hand, a stimulating effect of unemployment on conservatism has important economic consequences too, such as the earlier mentioned lower labour force participation among women. Therefore, it is also relevant to look at conservatism in itself.

3 Empirical strategy and data

Chapter 3 explains the empirical strategy and data. Section 3.1 explains the method that is used to measure the effect of being unemployed on conservatism. Section 3.2 describes the data that is used for the current paper. Lastly, Section 3.3 explores the descriptive statistics of the dataset.

3.1 Methodology

To measure the effect of being unemployed on social and political conservatism, the following general equation (1) is estimated:

$$\begin{aligned} \text{Conservatism}_{ijt} = & \alpha_j + \delta_t + \beta_0 \cdot \text{Unemployed}_{ijt} + \beta_1 \cdot \text{Age}_{ijt} + \beta_2 \cdot \text{Gender}_{ijt} + \\ & \beta_3 \cdot \text{Education}_{ijt} + \beta_4 \cdot \text{Maritalstatus}_{ijt} + \beta_5 \cdot \text{Socialclass}_{ijt} + \\ & \beta_6 \cdot \text{Children}_{ijt} + \eta_{ijt} \end{aligned} \quad (1)$$

The independent variable, Unemployed_{ijt} , indicates whether the individual is unemployed but available to work. Being available to work means that the individual is looking for a job, which ensures that he or she is in an uncertain situation. $\text{Unemployed}_{ijt} = 1$ if individual i in year t is unemployed, and 0 otherwise. For each individual regression, the dependent variable, $\text{Conservatism}_{ijt}$, is a different survey question related to either political or social conservatism. In this way, the effect of being unemployed can be estimated for various indicators of conservatism. To estimate political conservatism, the following survey question is used: 'In political matters, people talk of "the left" and "the right." How would you place your views on this scale, generally speaking?'. A scale is used that measures the political preference from 1 to 10. The higher the score, the more politically right-wing (conservative) the respondent considers him or herself. As explained in Chapter 2, politically conservative ideologies are related to an acceptance of inequality (Jost et al., 2003). Therefore, the view of the respondents on income inequality is investigated with the survey question: 'Should incomes be made more equal or do we need larger income differences as incentives?'. This is measured with a scale from 1 to 10, where 1 means that incomes should be made more equal and 10 means that larger income differences are necessary to provide incentives. To measure social conservatism, a range of varying questions related to social conservatism are used. The following survey questions are investigated more thoroughly: 'Justifiable: abortion', 'Being a housewife is just as fulfilling as working for pay', 'Do you think that a woman has to have children in order to be fulfilled or is this not necessary?', 'If a woman wants to have a child as a single parent but she doesn't want to have a stable relationship with a man, do you approve or disapprove?' and 'Both the husband and wife should contribute to household income'. All other survey questions that are used for the regression analyses can be found in Table A1 of the Appendix. The corresponding scales can be found in Table A2 of the Appendix.

The internal validity of the results is threatened by factors that influence both the employment status and the conservatism of an individual. To reduce the chance on biased outcomes, control variables are included into the regression. However, it is important to note that it is not possible to control for all confounding factors. To decrease possible bias that is invoked by these factors, fixed effects can be successfully applied since the dataset contains observations over a long period of time. These time fixed effects control for common year specific driving forces. Moreover, the analysis includes a large number of very different countries, so it is also useful to include country fixed effects to control for common country-specific driving forces of individual decisions. For each variable, index j refers to the country, i refers to the individual and t refers to the year. Therefore, α_j is a country fixed effect and δ_t is a time-fixed effect. Finally, η_{ijt} is mean-zero stochastic error.

The survey data contains information on many individual characteristics of the respondents, which makes it possible to control for potential confounding factors. The control variables that are included into the regression are age, gender, social class, education, marital status, and children. As mentioned before, [Milojevic et al. \(2014\)](#) find that older people became more conservative as a result of the 2008 global financial crisis, while this was not the case for younger people. Therefore, Age_{ijt} is included into the regression as a control variable. Moreover, [Shapiro and Mahajan \(1986\)](#) explain that there is a difference between men and women in their preference for certain policies, such as social welfare programs. This may influence their level of conservatism. Therefore, the variable $Gender_{ijt}$ is included as a control variable, which takes value 1 if the individual is a male, and 0 otherwise. Furthermore, [Clark and Lipset \(2001\)](#) show that there is a relationship between conservatism and social class. Therefore, the effect of social class on either political or social conservatism could be an important confounding factor in the analysis of the current paper. Hence, it is included into the regression as $Socialclass_{ijt}$, which is measured on a scale from 1 to 5, where 1 means upper class and 5 means lower class. Moreover, [Clark and Lipset \(2001\)](#) mention that people with little education are, for example, relatively culturally conservative. Hence, $Education_{ijt}$ is also included into the regression, which is measured on a scale from 1 to 8, where 1 means the lowest level of education and 8 means the highest level of education. Lastly, [Lye and Waldron \(1997\)](#) find a relationship between political conservatism and "traditional attitudes towards cohabitation and family". This could mean that, for example, being married or having children affects conservatism. Moreover, there is an obvious effect of being married or having children on the employment status of an individual, especially for women. However, the current paper uses 'unemployed but available to work' as a measure for the employment status of the individual and distinguishes between being unemployed and being a housewife. Therefore, being married or having children does not affect the individuals who are involuntarily unemployed in their employment status, since they would otherwise be in the group of housewives. However, in the long run, unemployed women with children tend to look for a job again when the children are older. Women who start looking for a job after they have been a housewife often experience difficulty with this, such that they

become involuntarily unemployed. In this way, having children or being married could have an effect on being involuntarily unemployed in the long run. Therefore, both factors will be included into the regression. The variable $Maritalstatus_{ijt}$ takes value 1 if the individual is married, and 0 otherwise. The variable $Children_{ijt}$ takes value 1 if the individual has no children, and 0 otherwise. Another source of endogeneity is reverse causality. This is not a threat to the current research, since it is very unlikely that the political and social conservatism of an individual influences whether the individual is involuntarily unemployed. Only if an individual has very extreme conservative ideas that are observable for employers, the conservatism could influence the employment status of an individual. However, it is likely that this is a negligibly small number of cases. Therefore, the employment status of the respondents is likely to be exogenous with respect to these variables.

For the effect of being unemployed on political scale, the effect is ambiguous. As explained before, uncertainty may stimulate a need for tradition (Jost et al., 2003), which would mean that being unemployed may increase a preference for the political right. On the other hand, being unemployed could decrease political conservatism because of its financial consequences, which may increase the need for income equality. This is often associated with the political left (Iversen and Soskice, 2001). Therefore, unemployed respondents of countries with a good social security system, may not be affected in their political preference as much as countries without a good social security system. The reason for this is that unemployed people who are living in a country with a more developed social security do not experience the negative financial consequences of their unemployment as much as unemployed people living in a country with no good social security system. To investigate this effect, linear regression equation (2) is performed, where an interaction term is included between $NWScountries_{ijt}$ and being unemployed. These countries include the Northern, Western and Southern European countries as defined by Eurovoc (2021). In this way, a distinction can be made between countries with, on average, a relatively more developed social security system and countries with a relatively less developed social security system. In reality, this distinction is not as clear as is now implied. However, there are too few observations to compare between individual countries. Therefore, groups of countries need to be made.

$$\begin{aligned}
Conservatism_{ijt} = & \alpha_j + \delta_t + \beta_0 \cdot Unemployed_{ijt} + \beta_1 \cdot Age_{ijt} + \beta_2 \cdot Gender_{ijt} + \\
& \beta_3 \cdot Education_{ijt} + \beta_4 \cdot Maritalstatus_{ijt} + \beta_5 \cdot Socialclass_{ijt} + \\
& \beta_6 \cdot Children_{ijt} + \beta_7 \cdot Unemployment_{ijt} \cdot NWScountries_{ijt} + \eta_{ijt}
\end{aligned} \tag{2}$$

Here, $NWScountries_{ijt} = 1$, if individual i in year t lives in a Northern, Western or Southern European country, and 0 otherwise.

Moreover, the variable gender is of particular interest, as there might be a difference

between men and women in the effect of being unemployed on conservatism. For example, it could be that women are more affected by being unemployed because their prospect on a new job is less promising than that for men, such that their conservatism changes differently. To evaluate how being unemployed affects the conservatism of men and women differently, an interaction term between gender and unemployed is included in linear regression equation (3) for certain survey questions. The corresponding coefficient will show a significant effect if being unemployed affects the conservatism of men and women differently.

$$\begin{aligned}
Conservatism_{ijt} = & \alpha_j + \delta_t + \beta_0 \cdot Unemployed_{ijt} + \beta_1 \cdot Age_{ijt} + \beta_2 \cdot Gender_{ijt} + \\
& \beta_3 \cdot Education_{ijt} + \beta_4 \cdot Maritalstatus_{ijt} + \beta_5 \cdot Socialclass_{ijt} + \\
& \beta_6 \cdot Children_{ijt} + \beta_7 \cdot Unemployment_{ijt} \cdot Gender_{ijt} + \eta_{ijt}
\end{aligned} \quad (3)$$

3.2 Data

For this research, the World Values Survey (WVS) time-series dataset for the period 1981-2020 is used. This dataset combines WVS surveys completed in waves 1 (1981-1983); 2 (1990-1992); 3 (1995-1998); 4 (2000-2004); 5 (2005-2008); 6 (2010-2014), and 7 (2017-2020). Since each wave uses a different sample, the dataset is a repeated cross-sectional dataset and not a panel dataset. Therefore, the WVS time-series shows "how the values of the given country have been changing over time, rather than how the values of a selected group of people have been changing over their life" (WVS, 2015). The dataset contains answers to questions related to the values and beliefs of people resulting in 251,799 usable observations. A list of the variables that are used in this research is given in Table A1 of the Appendix. The respondents that participated in the survey come from 94 different countries. The main advantages of this specific dataset are the extensive number of questions that are widely varying, the substantial number of countries participating in the survey and the long period of time that is covered by the seven different waves.

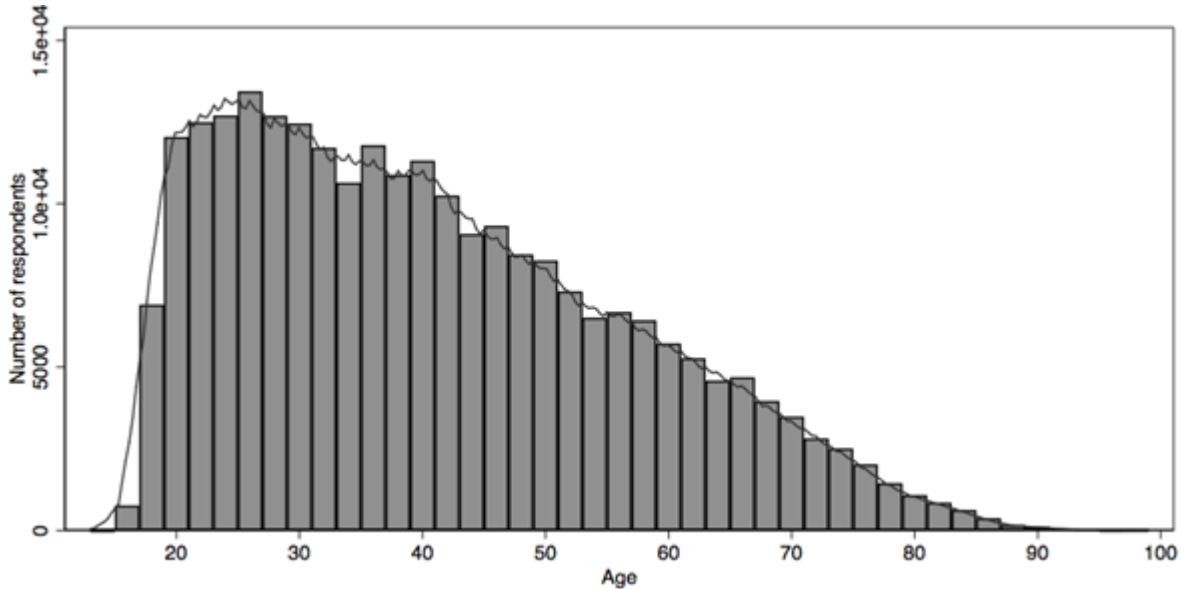
3.3 Descriptive Statistics

To keep most of the observations, the regression analyses are performed separately for each survey question. Therefore, the descriptive statistics show the information for each dependent variable (survey question related to conservatism) by dropping the other dependent variables. For the independent variable, being unemployed, and the control variables, the observations of all dependent variables that are used are kept for the descriptive statistics, such that this overall sample consists of 251,799 observations. Table A3 of the Appendix reports the summary statistics of all variables that are included into the regression. To summarize, the average age of the respondents is 41 years. The distribution of the age of the sample is shown in Figure 1, which visualizes a right-skewed distribution. Next to this, there are slightly more women

(51.0%) than men (49.0%) in the sample.

Figure 1

Distribution of Age in the sample



Note. Figure 1 shows the distribution of the variable age in the sample. The sample consist of 251,799 respondents from the World Values Survey time-series dataset for the period 1981-2020, with a range from 13 to 99 years old. The x-axis provides the age and the y-axis provides the number of respondents.

Moreover, Table A4 of the Appendix shows the different levels of education. For each level, it shows the percentage of individuals that completed or inadequately completed it. For example, 19.54 percent of the respondents completed secondary school. Concerning the marital status and children of the respondents, 63.80 percent is married and 70.50 percent has one or more children. The average social class of the respondents is 'Lower middle class'. Lastly, the percentage of the involuntarily unemployed is 9.97 percent. This means that from the 251,799 respondents, 25,107 is unemployed. The ratio between unemployed women and men is respectively 46.60 and 53.40 percent. Therefore, the unemployed respondents consist of slightly more men than women. However, this does not appear to be a large difference that could influence the results.

The large number of different countries in the sample makes it difficult to make conclusions about the generalizability of the results based on the averages that are represented in Table A3 of the Appendix. The composition of countries in the sample does not generate an adequate representation of the world. For example, China makes out 2.20 percent of the sample. In reality, however, the Chinese population has made up more than 18 percent of the total world population in the past decades ([Worldometers, 2021](#)). Therefore, the high number of different countries in the sample rather improves the internal validity than show an actual representation of the world population. However, to get an idea of the external validity of the

results, the averages of the characteristics of the respondents within a country can be compared to real averages. For example, the averages for the United States from the most recent wave of the WVS (2010-2014) are shown in Table A5 of the Appendix. These results come from the survey that was performed in 2011. The median age of this sample is 49.2 years. On the contrary, the average age in the United States in 2010 was 36.9 ([Worldometers, 2021](#)). Next to this, the average level of education of these respondents is: 'Some university without degree/Higher education - lower-level tertiary certificate'. This is not comparable to the actual level of education in the United States around that year. For example, in 2008, there were only 44,168,000 people who attained the level of having had some college ([Snyder and Dillow, 2010](#)). This was around 14.3 percent of the whole population. Therefore, the average level of education of this sample seems rather high. Furthermore, the unemployment rate is quite similar to the actual unemployment rate. For this sample, the unemployment rate is 7.70 percent. This is the share of involuntary unemployed people. In 2011, the unemployment rate in the United States was 8.1 percent ([Statista, 2021](#)). Overall, this comparison shows that the results of the research are not externally valid for all countries together, but also not for the countries separately.

4 Results

Chapter 4 shows the results of the research. Section 4.1 presents the results of the effect of being unemployed on political conservatism. Section 4.2 shows the results of the effect of being unemployed on social conservatism. Lastly, Section 4.3 further investigates the results with an interaction term for certain survey questions.

4.1 Political conservatism

Table 1 shows the results of linear regression equation (1). Column 1 shows that there is no significant effect of being unemployed on the political scale. This will be further investigated in Section 4.3. On the other hand, Column 2 shows a significant negative effect of being unemployed on the view on income inequality. The coefficient of -0.103 indicates that the variable for the view on income inequality decreases by 1.14 percentage point² if unemployed takes the value of 1. The scale measures from 'Incomes should be made more equal' to 'We need larger income differences as incentives'. Therefore, being unemployed is associated with a decrease in the preference for income inequality. This also shows that being unemployed may be associated with a decrease in political conservatism.

4.2 Social conservatism

For the 11 survey questions that are used to measure social conservatism, the results are varying. Table A6 of the Appendix includes the regression results for all survey questions. For the survey question 'Justifiable: abortion', Column 3 of Table 1 shows a significant negative effect of being unemployed on the view on abortion. The coefficient of -0.041 indicates that the variable for the view on abortion decreases by -0.46 percentage point³ if unemployed takes the value of 1. Here, a scale is used from 'Never justifiable' to 'Always justifiable'. Therefore, being unemployed is associated with a decrease in support for abortion. This could indicate an increase in social conservatism. On the other hand, there are many survey questions related to social conservatism, that do not show significant effects. For example, Column 4 of Table 1 shows no significant effect of being unemployed on the survey question 'Being a housewife is just as fulfilling as working for pay'. These results go against the hypothesis that being unemployed may stimulate conservatism. Therefore, this is further investigated in Section 4.3.

²The scale for the view on income inequality uses 9 steps to measure from 'Incomes should be made more equal' to 'We need larger income differences as incentives'. Therefore, the effect of being unemployed is calculated by $-0.103/9 = -1.14$ percentage point.

³The scale for the view on abortion uses 9 steps to measure from 'Never justifiable' to 'Always justifiable'. Therefore, the effect of being unemployed is calculated by $-0.041/9 = -0.46$ percentage point.

Table 1

Regression results for survey questions related to political and social conservatism

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent variable:	Political scale	Income inequality	Abortion justifiable	Housewife	Contribution to income	Woman needs children	Woman as single parent
Unemployed	-0.013 (0.018)	-0.103*** (0.020)	-0.041** (0.018)	0.001 (0.006)	-0.003 (0.007)	0.006 (0.004)	-0.011 (0.007)
Age	-0.001** (0.000)	-0.005*** (0.000)	-0.012*** (0.000)	-0.003*** (0.000)	0.000 (0.000)	-0.002*** (0.000)	0.005*** (0.000)
Gender	0.064*** (0.011)	0.124*** (0.012)	-0.026** (0.010)	-0.053*** (0.004)	0.108*** (0.004)	0.006** (0.003)	0.069*** (0.004)
Education	-0.062*** (0.003)	0.084*** (0.003)	0.109*** (0.003)	0.025*** (0.001)	-0.007*** (0.001)	-0.016*** (0.001)	-0.031*** (0.001)
Marital status	0.061*** (0.014)	0.098* (0.015)	-0.070*** (0.014)	-0.029*** (0.005)	0.033*** (0.006)	0.022*** (0.003)	0.051*** (0.005)
Social class	-0.143*** (0.006)	-0.211*** (0.006)	-0.077*** (0.006)	0.005** (0.002)	-0.004 (0.002)	0.007*** (0.001)	0.004* (0.002)
Children	-0.078*** (0.016)	-0.053*** (0.017)	-0.019 (0.016)	0.021*** (0.005)	0.012* (0.007)	-0.066*** (0.004)	0.019*** (0.006)
Constant	7.756*** (0.056)	5.676*** (0.061)	4.973*** (0.054)	2.287*** (0.019)	1.496*** (0.023)	0.670*** (0.014)	1.958*** (0.020)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	185,326	243,253	233,672	235,313	109,283	107,958	160,773

Note. Table 1 shows the results of linear regression equation (1), with being unemployed as independent variable. Each column shows the results for a different dependent variable. Columns 1 and 2 use a dependent variable related to political conservatism, Columns 3-7 use a dependent variable related to social conservatism. Each regression includes year and country fixed effects. Standard errors are in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1.

4.3 Interaction effects

As mentioned in Section 4.1, there is no significant effect of being unemployed on the political scale. Section 3.1 explains that it could be argued that the financial consequences of being unemployed play a stronger role on political conservatism than the uncertainty of being unemployed. Therefore, there might be a different effect on political conservatism between unemployed respondents from countries where being unemployed has severe financial consequences, due to a relatively less developed social security system, as compared to unemployed respondents from countries with a relatively more developed social security system. To investigate this effect, linear regression equation (2) is performed, where an interaction term is included between $NWScountries_{ijt}$ and being unemployed. Column 1 of Table 2 shows that the coefficient of 0.312 for the interaction term is significant. This means that the effect of being unemployed on the political scale may differ between respondents from different countries. Columns 1 and 2 of Table 3 show that there is only a significant effect of being unemployed on the political scale for the group of countries with a relatively less developed social security system, and not for the group of countries with a relatively more developed social security system. The coefficient of -0.178 indicates that the variable for the political scale decreases by 1.98 percentage point⁵ if unemployed takes the value of 1. The scale measures the political preference from 'Left' to 'Right'. Therefore, being unemployed may be associated with an increasing preference for the political left, but only for the countries with a relatively less developed social security system.

Moreover, for the question 'Being a housewife is just as fulfilling as working for pay' there is no significant effect. This counterintuitive result may be caused by the difference between men and women. The effect of being unemployed on the perception of being a housewife may be different for women than for men. Indeed, it is likely that an involuntarily unemployed woman disagrees stronger with this statement than an involuntarily unemployed man. Therefore, linear regression equation (3) includes an interaction term between gender and being unemployed. Column 1 of Table 4 shows that the coefficient of -0.057 for the interaction term is significant for the question whether being a housewife is as fulfilling as working for pay. This means that being unemployed affects men and women differently in their answer to this question. Table 5 shows the results of linear regression equation (1) for men and women separately for certain survey questions. Column 1 shows for women a significant positive effect of being unemployed on the question whether being a housewife is as fulfilling as working for pay. The coefficient of 0.024 indicates that the value for this question increases by 0.60 percentage point⁶ if unemployed takes the value of 1. Here, a scale is used from 'Agree strongly' to 'Strongly disagree'. Therefore, being unemployed is associated with an increase in resistance by women to such a gender stereotype. For men, on the other hand, Column 2 of Table 5 shows that

⁵The scale for political preference uses 9 steps to measure from 'Left' to 'Right'. Therefore, the effect of being unemployed is calculated by $-0.178/9 = -1.98$ percentage point.

⁶The scale for the view on being a housewife uses 4 steps to measure from 'Agree strongly' to 'Strongly disagree'. Therefore, the effect of being unemployed is calculated by $0.024/4 = 0.60$ percentage point.

there is a significant negative effect. The coefficient of -0.022 indicates that the value for this question decreases by 0.55 percentage point⁷ if unemployed takes the value of 1. Hence, being involuntarily unemployed may be associated with an increase in social conservatism for men. The reason for this could be that involuntarily unemployed men believe that they have more right to a job than women, and therefore believe that being a housewife is just as fulfilling as working for pay. The different results for men and women could cause the insignificant effect of being unemployed on the question whether being a housewife is as fulfilling as working for pay, as shown in Column 4 of Table 1.

Furthermore, for the question 'Do you think that a woman has to have children in order to be fulfilled or is this not necessary?', the coefficient of 0.006 shown in Column 6 of Table 1 is also insignificant. This would mean that there is no effect of being unemployed on the traditional view that women need children to be fulfilled. However, Column 2 of Table 4 shows that the coefficient of -0.025 of the interaction term between gender and being unemployed is significant. Therefore, this difference between men and women is also investigated by separate regressions. Column 3 of Table 5 shows that there is a significant positive effect of being unemployed on this survey question, but only for women. The coefficient of 0.017 indicates that the value for this question increases by 0.43 percentage point⁸ if unemployed takes the value of 1. Here, a scale is used from 'Agree strongly' to 'Strongly disagree'. Therefore, being unemployed is associated with an increase in the need to have children to be fulfilled, but only for women. This would mean a possible positive association between being unemployed and social conservatism for women. For men, on the other hand, Column 4 of Table 5 shows no significant effect for the same regression. The reason for this could be that unemployed women are more likely than men to adhere to certain traditions to be fulfilled, such as having children. It could be argued that having children is more important for unemployed women than for unemployed men.

Lastly, for the question 'If a woman wants to have a child as a single parent but she doesn't want to have a stable relationship with a man, do you approve or disapprove?', the coefficient of -0.011 shown in Column 7 of Table 1 is also insignificant. Moreover, Column 3 of Table 4 shows that the coefficient of 0.059 for the interaction term between gender and being unemployed is, again, significant. Column 5 and 6 of Table 5 show the difference between men and women in the effect of being unemployed on the single parent question. For women, Column 5 shows a coefficient of -0.030, which indicates that the value for this question decreases by 1.00 percentage point⁹ if unemployed takes the value of 1. Here, a scale is used from 'Approve'

⁷The scale for the view on being a housewife uses 4 steps to measure from 'Agree strongly' to 'Strongly disagree'. Therefore, the effect of being unemployed is calculated by $-0.022/4 = -0.55$ percentage point.

⁸The scale for the view on whether a woman has to have children in order to be fulfilled uses 4 steps to measure from 'Agree strongly' to 'Strongly disagree'. Therefore, the effect of being unemployed is calculated by $0.017/4 = 0.43$ percentage point.

⁹The scale for the view on a woman as a single parent uses 3 steps to measure from 'Approve' to 'Disapprove'. Therefore, the effect of being unemployed is calculated by $-0.030/3 = -1.00$ percentage point.

to 'Disapprove'. Therefore, being unemployed is associated with an increase in the support for single mothers, but only among women. This could mean a negative association between being unemployed and social conservatism, but only for women. There is no significant effect for men, as is shown in Column 6 of Table 5.

However, this reasoning cannot be used for each survey question that shows insignificant results. For the question 'Both the husband and wife should contribute to household income', Column 5 of Table 1 shows that the coefficient of -0.003 is insignificant. Moreover, Column 4 of Table 4 shows that the coefficient of -0.014 for the interaction term is insignificant. Therefore, being unemployed does not affect men and women differently in their answer to this question. This result logically follows from the definition of being unemployed. An unemployed respondent is defined as a person who is involuntarily unemployed and looking for a job. Thus, it is likely that this unemployed person likes both the husband and wife to contribute to the income.

From these regressions it can be concluded that the effect of being unemployed on the survey question related to social conservatism differs between men and women. However, this is not the case for each question. Overall, the survey questions show varying effects, which could mean the survey questions are not a very consistent measure of conservatism.

Table 2
Regression results for political scale with interaction term

(1)	
Dependent variable:	Political scale
Unemployed	-0.296*** (0.059)
Age	0.001** (0.000)
Gender	0.064*** (0.011)
Education	-0.062*** (0.003)
Marital status	0.061*** (0.014)
Social class	-0.142*** (0.006)
Children	-0.078*** (0.016)
NWS countries X Unemployed	0.312*** (0.062)
Constant	7.755*** (0.056)
Year FE	Yes
Country FE	Yes
Observations	185,326

Note. Table 2 shows the results of linear regression equation (2), estimating the effect of being unemployed on political scale. An interaction term between NWS countries and being unemployed is included. The regression includes year and country fixed effects. Standard errors are in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 3*Regression results for political scale for NWS countries and other countries separately*

	(1)	(2)
Dependent variable:	NWS countries: Political scale	Other countries: Political scale
Unemployed	0.001 (0.020)	-0.178*** (0.051)
Age	0.000 (0.000)	0.006*** (0.001)
Gender	0.059*** (0.012)	0.097*** (0.025)
Education	-0.063*** (0.003)	-0.065*** (0.006)
Marital status	0.051*** (0.016)	0.058** (0.028)
Social class	-0.113*** (0.007)	-0.418*** (0.016)
Children	-0.101*** (0.018)	0.039 (0.032)
Constant	7.682*** (0.060)	6.580*** (0.129)
Year FE	Yes	Yes
Country FE	Yes	Yes
Observations	160,679	24,647

Note. Table 3 shows the results of linear regression equation (1), measuring the effect of being unemployed on political scale. Column 1 shows the regression results with only the NWS countries included and Column 2 includes all other countries. This generates a distinction between countries with, on average, a relatively more developed social security system and countries with a relatively less developed social security system. Each regression includes year and country fixed effects. Standard errors are in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 4*Regression results for social conservatism with interaction term*

	(1)	(2)	(3)	(4)
Dependent variable:	Housewife	Woman needs children	Woman as single parent	Contribution to income
Unemployed	0.030*** (0.009)	0.020*** (0.006)	-0.041*** (0.009)	-0.005 (0.011)
Age	-0.002*** (0.000)	0.002*** (0.000)	-0.005*** (0.000)	0.000 (0.000)
Gender	-0.047*** (0.004)	0.009*** (0.003)	-0.063*** (0.004)	0.109*** (0.005)
Education	0.025*** (0.001)	-0.016*** (0.001)	-0.031*** (0.001)	-0.007*** (0.001)
Marital status	-0.029*** (0.005)	0.022*** (0.003)	0.051*** (0.005)	0.033*** (0.006)
Social class	0.005** (0.002)	0.007*** (0.001)	0.004* (0.002)	-0.004 (0.002)
Children	0.021*** (0.005)	-0.066*** (0.004)	0.018*** (0.006)	-0.012* (0.007)
Gender X Unemployed	-0.057*** (0.012)	-0.025*** (0.009)	0.059*** (0.013)	-0.014 (0.014)
Constant	2.284*** (0.019)	0.669*** (0.014)	1.960*** (0.020)	1.496*** (0.023)
Year FE	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
Observations	235,313	107,958	160,773	109,283

Note. Table 4 shows the results of linear regression equation (3), with being unemployed as independent variable. Each column shows the results for a different dependent variable related to social conservatism, for which being unemployed showed an insignificant effect on conservatism. For each regression, the results of the interaction term between gender and being unemployed are included. Each regression includes year and country fixed effects. Standard errors are in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 5*Regression results for social conservatism for men and women separately*

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Women: Housewife	Men: Housewife	Women: Woman needs children	Men: Woman needs children	Women: Woman as single parent	Men: Woman as single parent
Unemployed	0.024*** (0.009)	-0.022*** (0.008)	0.017*** (0.006)	-0.002 (0.006)	-0.030*** (0.010)	0.010 (0.009)
Age	-0.003*** (0.000)	-0.002*** (0.000)	0.001*** (0.000)	0.002*** (0.000)	0.006*** (0.000)	-0.004*** (0.000)
Gender	-	-	-	-	-	-
Education	0.032*** (0.001)	-0.018*** (0.001)	-0.019*** (0.001)	-0.014*** (0.001)	-0.031*** (0.001)	-0.029*** (0.001)
Marital status	-0.042*** (0.006)	-0.023*** (0.007)	0.022*** (0.004)	0.020*** (0.006)	0.065*** (0.007)	0.038*** (0.008)
Social class	0.003 (0.003)	-0.007** (0.003)	0.008*** (0.002)	0.005** (0.002)	0.006* (0.003)	0.004 (0.003)
Children	0.025*** (0.007)	0.012 (0.008)	-0.084*** (0.008)	-0.047*** (0.006)	0.038*** (0.008)	-0.007 (0.009)
Constant	2.301*** (0.026)	2.225*** (0.026)	0.716*** (0.019)	0.621*** (0.020)	1.919*** (0.028)	2.045*** (0.028)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	121,877	113,436	55,554	52,404	82,170	78,603

Note. Table 5 shows the results of linear regression equation (1), with being unemployed as independent variable. Each alternating column shows the results of a different dependent variable, for which the interaction term between gender and being unemployed was significant. Column 1, 3 and 5 show the results including only women, Column 2, 4 and 6 show the results including only men. Each regression includes year and country fixed effects. Standard errors are in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

5 Robustness

Chapter 5 performs various robustness checks. Section 5.1 tests the assumptions for the multiple linear regression. Section 5.2 performs a sensitivity analysis to estimate the selection of unobservables. Lastly, Section 5.3 shows the results of propensity score matching.

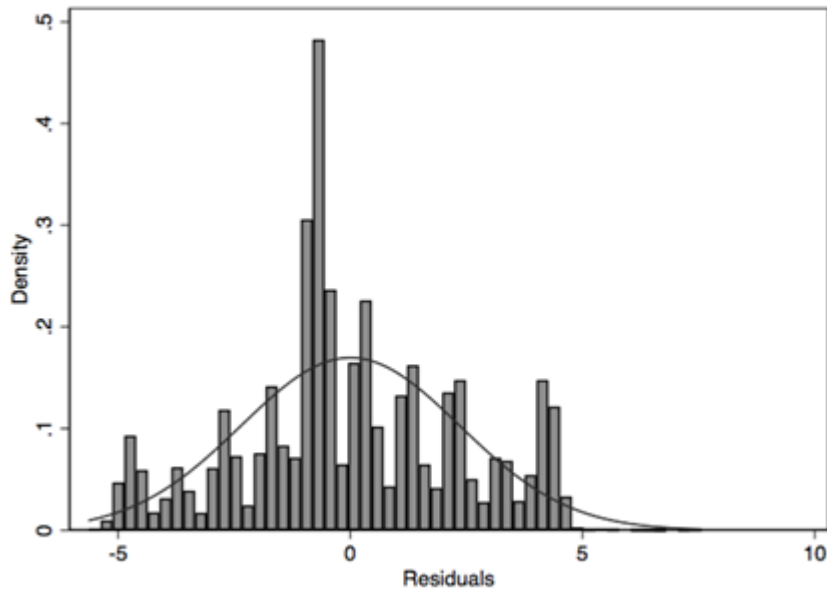
5.1 Assumptions linear regression

To begin with, the following assumptions need to be checked for multiple linear regression: the relationship between the independent and dependent variable needs to be linear, there should be no multicollinearity, the residual errors should be independent and identically distributed, there should be no significant outliers, the residuals of the model need to be normally distributed and the residuals have constant variance at every level of the independent variable (Osbourne and Waters, 2002). These assumptions are considered for the regression of political scale on being unemployed.

First of all, there is no threat of significant outliers, since all dependent variables are measured on a scale. To check whether there is multicollinearity, the variance inflation factor (VIF) is calculated for each variable. As a rule of thumb, a variable with a tolerance value ($1/\text{VIF}$) that is lower than 0.1 could be a sign of collinearity. Table A7 of the Appendix shows no tolerance values lower than 0.1, so there is no sign of multicollinearity. Moreover, to check for independence of observations (i.e., independence of residuals), the Durbin-Watson statistic is performed for the regression of political scale on being unemployed. For the regression of political scale on being unemployed, the output for the Durbin Watson d-statistic is 1.670. If the d-statistic is close to 2, it means there is no autocorrelation (White, 1992). Therefore, it is likely that there is no autocorrelation for this regression analysis, so it cannot be rejected that there is independence of observations. Moreover, the variance of the residuals from the model needs to be constant and unrelated to the independent variable (homoscedasticity). To check for homoscedastic residuals, the White's test is performed. The null-hypothesis is that the variance of the residuals is homogenous. If the p-value is very small, the null-hypothesis should be rejected. Here, the White's test gives a p-value of 0.000. Therefore, the null-hypothesis is rejected, which means the residuals are not homogeneous and there is no homoscedasticity. Lastly, Figure 2 shows a histogram of the distribution of the residuals. From Figure 2 it cannot be concluded that the residuals are normally distributed, so the Shapiro-Wilk W test is performed. The null-hypothesis is that the residuals are normally distributed. If the p-value is very small, the null-hypothesis should be rejected. The output for the Shapiro-Wilk test is a p-value of 0.000. Therefore, the null-hypothesis is rejected, which means the residuals are not normally distributed. From these tests it can be concluded that not all assumptions of multiple linear regression are met.

Figure 2

Distribution of residuals



Note. Figure 2 shows a histogram of the distribution of the residuals. The x-axis provides the residuals and the y-axis provides the density. The continuous wave indicates the shape of a normal distribution.

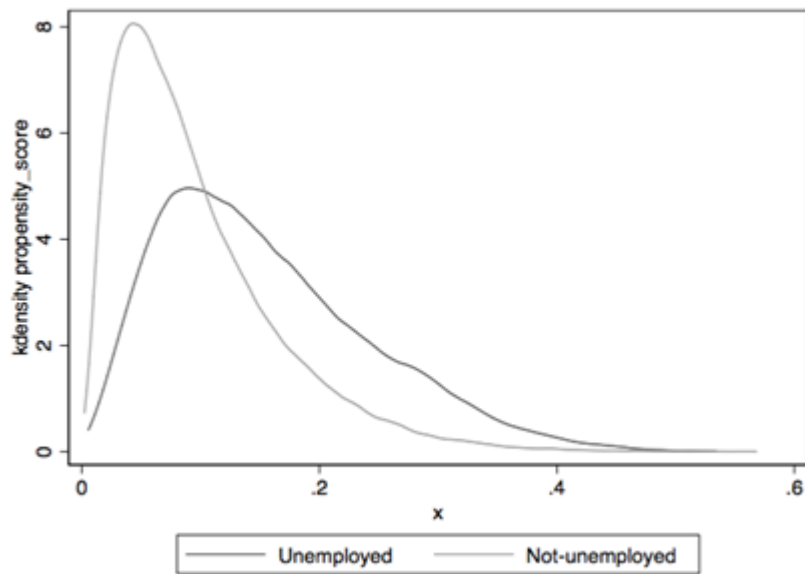
5.2 Sensitivity analysis

A sensitivity analysis is performed "to evaluate the possible degree of omitted variable bias under the assumption that the selection on the observed controls is proportional to the selection on the unobserved controls" (Oster, 2013). This is measured by delta. For linear regression equation (1) with political scale as dependent variable and being unemployed as independent variable, delta takes the value of 0.013. This means that only a tiny proportion of unobserved controls is needed to make the treatment effect zero. Hence, there are many omitted variables, which threatens the internal validity of the results.

5.3 Propensity score matching

To relax the linearity assumption, propensity score matching is performed. An important assumption that needs to be fulfilled for propensity score matching is common support, which is shown in Figure 3. Table 6 shows the estimated effect of being unemployed on the view on income inequality with and without matching. It can be concluded that the results are quite similar, such that a linear regression may be an adequate approximation to measure the effect of being unemployed on conservatism. However, this cannot be confirmed by the results of propensity score matching.

Figure 3
Common support of Propensity Score Matching



Note. Figure 3 shows the propensity scores for both the treatment and control group. The x-axis shows the propensity scores and the y-axis shows the density of the propensity scores, between 0 and 8.

Table 6
Results of Propensity Score Matching

	Income inequality - with matching	Income inequality - without matching
Unemployed	-0.118*** (0.024)	-0.103*** (0.020)
Observations	243,253	243,253

Note. Table 6 shows the regression results of linear regression equation (1) of income equality on being unemployed. Column 1 shows the regression results with the use of Propensity Score Matching on the basis of 5 nearest neighbours. Column 2 shows the results without matching. Standard errors are in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

6 Discussion

Chapter 6 provides a discussion of the results that are found in combination with the robustness checks. Section 6.1 discusses the suitability of the dependent variables. Section 6.2 elaborates on the internal validity of the results. Section 6.3 explains the small economic significance of the results. Lastly, Section 6.4 mentions the external validity.

6.1 Suitability of the dependent variables

The results of the regression analyses show varying outcomes. Firstly, the effect of being unemployed on the political scale only shows significant results for the group of countries with a relatively less developed social security system. This could mean that there only is an association between being unemployed and political conservatism for countries with a relatively less developed social security, because of the more severe financial consequences of being unemployed that may be experienced in these countries. However, these results are not conclusive because there may also be large differences in social security within both groups. Therefore, it would be useful to look at individual countries. The number of respondents within a country for this data is too small to compare the results of individual countries, so it would be advantageous for future research to use larger samples of each country.

Moreover, the regression analysis of the view on income inequality on being unemployed shows a significant negative effect of being unemployed, which could mean a negative association between being unemployed and political conservatism. On the contrary, [Roccato et al. \(2013\)](#) found that conservatism increased when respondents lived in areas with high unemployment rates. However, this considers a different situation than being unemployed yourself. The factor that drives an increase in conservatism among individuals that live in areas with high unemployment rates is rather related to an aversion of poverty, than to the uncertain situation of being unemployed yourself. Moreover, being involuntarily unemployed often goes hand in hand with financial concerns. Therefore, unemployed individuals are likely to prefer income equality and, thus, political ideologies of left-wing parties ([Iversen and Soskice, 2001](#)). This could explain the negative association between being unemployed and the preference for income inequality. The use of the employment status of the respondents as independent variable implied that its effect on conservatism was due to the uncertain situation in which the unemployed respondent finds him or herself. However, being unemployed has many other effects, such as the earlier mentioned financial difficulties, which could have an opposite effect on conservatism than the effect of its uncertain situation. This complicates the interpretation of the results.

For the questions related to social conservatism, there was either a positive effect, a negative effect or no effect of being unemployed. For example, for the question 'Justifiable: abortion', the regression analysis showed a positive association between being unemployed and

this measure for conservatism. However, as mentioned in Section 4.3, some questions did not show a significant effect of being unemployed on social conservatism. For the questions 'Being a housewife is just as fulfilling as working for pay', 'Do you think that a woman has to have children in order to be fulfilled or is this not necessary?' and 'If a woman wants to have a child as a single parent but she doesn't want to have a stable relationship with a man, do you approve or disapprove?', the inclusion of an interaction term between gender and being unemployed showed that the insignificant effect of being unemployed on social conservatism may be driven by the difference between men and women. However, this was not the case for all insignificant results. For example, for the question 'Both the husband and wife should contribute to household income', there was no difference in the effect between men and women. Here, the insignificant effect of being unemployed on conservatism was rather caused by the unsuitability of the survey question as measurement for social conservatism, because not only the uncertainty of unemployment played a role, but also its financial consequences. Since the results are very different for many of the survey questions, it can be concluded that the survey questions are not very consistent measures for conservatism. This needs to be taken into account with the interpretation of the results.

6.2 Internal validity

To begin with, Section 5.1 showed that not all assumptions for multiple linear regression are met. This threatens the internal validity of the results of the linear regression analyses. Moreover, a substantial threat to the internal validity of the results is due to omitted variable bias. Section 5.2 showed the result of the sensitivity analysis. This analysis showed that there are many unobserved variables that bias the results. Next to this, there is also the possibility of observable variables that are omitted. For example, religion or race were not included into the regression, since these were difficult to quantify or put on a scale. However, these observable characteristics may have an effect on both the employment status and the conservatism of a respondent. Therefore, there are omitted variables that may bias the estimated effect. Moreover, the results may also be affected by reporting bias caused by the use of surveys. Especially the sensitive survey questions that are used for the regression analysis could cause the respondents to answer dishonestly.

6.3 Economic significance

As mentioned in Section 4.1, the effect of being unemployed on, for example, the view on income inequality, is only -1.14 percentage point. Although this effect is statistically significant, it is not that economically significant. It could be that people are quite resolute in their possible social and political conservatism, even if they become unemployed. Another reason could be that the survey questions are not very strong indicators of conservatism. The low economic significance is also the case for the other regression analyses that showed significant

results. The effects are only very small, such they are not likely to influence policy.

6.4 External validity

As mentioned in Section 3.3, the results of the regression analyses may not be externally valid. The analyses include many different countries, such that the results are difficult to generalize to one specific country. Moreover, the observations are not suitable to analyse the effect of being unemployed on conservatism for countries separately, because there would be too few observations. Therefore, the results are not externally valid.

7 Conclusion

The COVID-19 crisis has drastically changed the lives of almost everyone on the planet. The inspiration for the current paper was the uncertainty that has increased substantially due to the COVID-19 crisis. As mentioned before, [Boring and Moroni \(2021\)](#) found that people who experienced relatively high financial distress during the COVID-19 crisis shifted their views towards more unequal gender norms. Many people became unemployed during the crisis, which stimulated uncertainty. Therefore, the current paper investigated the effect of being unemployed on political and social conservatism. To measure either political or social conservatism, survey questions from the World Values Survey time-series dataset for the period 1981-2020 were used. The regression of political scale on being unemployed only showed a significant negative effect for countries with a relatively less developed social security system. This could mean a negative association between being unemployed and conservatism for these countries. For the regression of the view on income inequality on being unemployed, there also was a significant negative effect. Therefore, being unemployed could be associated with a decrease in the preference for income inequality. However, these effects were driven by the financial consequences of being unemployed, rather than the consequences of uncertainty. Moreover, for the questions related to social conservatism, being unemployed showed either significant positive effects, significant negative effects or insignificant effects of being unemployed. Some questions related to social conservatism were influenced by the difference between men and women, such that other effects were found than expected. Therefore, the results differed much per question, which indicates that the survey questions were not consistent in measuring conservatism. However, even for the questions that showed an increasing effect of being unemployed on conservatism, the effects were too small to be economically significant.

Moreover, the results were threatened by certain limitations of the research. Firstly, Section 5.1 showed that not all linear regression assumptions were met. The results of propensity score matching were not very different from the results of the linear regression, but this is not a confirmation of a linear relationship between the independent and dependent variable. Another limitation of the research is the use of existing survey questions. This made it more difficult to adequately measure conservatism. Future research may want to create new survey questions that focus more on the uncertainty that is caused by unemployment and relate stronger to either political or social conservatism. Next to this, there were unobservable variables, as well as observable variables, that were not included into the regression, which may bias the results. Hence, one needs to be careful with the interpretation of the results. Therefore, it is recommended for future research to use a method that is not threatened by omitted variables that much. Even if the results could be causally interpreted, the results would be difficult to generalise externally. A solution to this would be to conduct a research in multiple different countries with many observations for each country. Therefore, the hypothesis that the uncertain situation that is caused by being unemployed may increase conservatism cannot

be confirmed. These conclusions mean further research is necessary to investigate the effect of being unemployed, and its uncertainty, on political and social conservatism.

While the results of this research may be inconclusive, previous literature does indicate that conservatism may be driven by uncertainty ([Jost et al., 2007](#)). Moreover, the effects of being unemployed are easily overshadowed by the financial consequences, such that potential other effects may not get enough attention. Therefore, further research in the effect of being unemployed on conservatism may be very useful. Especially now that many people have lost their job due to the COVID-19 crisis, it is important to also look at the consequences that are less obvious. An increase in conservatism could have important economic results, such as lower labour force participation among women ([Göksel, 2013](#)). As [Boring and Moroni \(2021\)](#) showed in their research, gender stereotypes have decreased in Europe over the past decades. To preserve this trend, it is important to understand the determinants of conservatism and, thus, continue research on this topic. Only then, effective policies may be implemented to stimulate the declining trend of conservatism.

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9 Appendix

Table A1
Variable list

Variable	Explanation
Wave	The wave of the survey
Country	The country in which the individual lives
Year	The year of the survey
Age	The age of the individual
Gender	The gender of the individual
Education	The highest level of education attained by the individual
Marital status	Marital status of the individual
Social class	The social class the individual belongs to
Children	The number of children the individual has
Employment status	The employment status of the individual
NWS countries	Indication whether the individual lives in a Northern, Western or Southern European country
Political scale	Question: In political matters, people talk of "the left" and "the right." How would you place your views on this scale, generally speaking?
Income equality	Question: Incomes should be made more equal vs We need larger income differences as incentives
Homosexuality justifiable	Question: Justifiable, homosexuality
Abortion justifiable	Question: Justifiable, abortion
Divorce justifiable	Question: Justifiable, divorce
Housewife	Question: Being a housewife is just as fulfilling as working for pay
Contribution to income	Question: Both the husband and wife should contribute to household income
Right to job	Question: When jobs are scarce, men should have more right to a job than women
Political leaders	Question: On the whole, men make better political leaders than women do
Importance university	Question: A university education is more important for a boy than for a girl
Child suffers	Question: A pre-school child is likely to suffer if his or her mother works
Woman needs children	Question: Do you think that a woman has to have children in order to be fulfilled or is this not necessary?
Woman as single parent	Question: If a woman wants to have a child as a single parent but she doesn't want to have a stable relationship with a man, do you approve or disapprove?

Note. Table A1 presents a list of all relevant variables for the research. The variables come from the World Values Survey time-series dataset for the period 1981-2020. For each variable, the corresponding explanation is given.

Table A2*Survey questions with corresponding scales*

	(1)	(2)	(3)
Variable	Steps on scale	First note	Last note
Political scale	9	Left	Right
Income inequality	9	Incomes should be made more equal	We need larger income differences as incentives
Homosexuality justifiable	9	Never justifiable	Always justifiable
Abortion justifiable	9	Never justifiable	Always justifiable
Divorce justifiable	9	Never justifiable	Always justifiable
Housewife	4	Agree strongly	Strongly disagree
Contribution to income	4	Agree strongly	Strongly disagree
Right to job	4	Agree strongly	Strongly disagree
Political leaders	4	Agree strongly	Strongly disagree
Importance university	4	Agree strongly	Strongly disagree
Child suffers	4	Agree strongly	Strongly disagree
Woman needs children	2	Not necessary	Needs children
Woman as single parent	3	Approve	Disapprove

Note. Table A2 shows the survey questions that are used as a measure of conservatism with their corresponding scales. Column 1 presents the number of steps on the scale. Column 2 and 3 provide, respectively, the first and last note of each scale.

Table A3*Summary statistics*

	(1)	(2)	(3)	(4)	(5)
Variable	Observations	Mean	Std.Dev.	Min	Max
Year	251,799	2004.48	6.252	1995	2016
Age	251,799	40.536	15.956	13	99
Gender	251,799	0.490	.500	0	1
Education	251,799	4.705	2.230	1	8
Marital status	251,799	0.638	0.480	0	1
Social class	251,799	3.299	0.979	1	5
Children	251,799	0.295	0.456	0	1
Unemployed	251,799	0.900	0.300	0	1
Political scale	185,326	5.682	2.382	1	10
Income inequality	243,253	5.695	2.991	1	10
Homosexuality justifiable	224,026	3.195	3.031	1	10
Abortion justifiable	233,672	3.413	2.868	1	10
Divorce justifiable	239,269	4.662	3.099	1	10
Housewife	235,313	2.207	0.905	1	4
Contribution to income	109,283	1.771	0.744	1	4
Right to job	247,696	1.790	0.721	1	3
Political leaders	237,791	2.454	0.981	1	4
Importance university	242,509	2.983	0.912	1	4
Child suffers	75,980	2.509	0.915	1	4
Woman needs children	107,958	0.647	0.478	0	1
Woman as single parent	160,773	0.635	0.731	0	2

Note. Table A3 shows the summary statistic of the variables that are in the World Values Survey time-series dataset for the period 1981-2020. Column 1 shows the number of observations, Column 2 shows the mean and Column 3 shows the standard deviation. Columns 4 and 5 show, respectively, the minimum and maximum value of the variables.

Table A4*Level of education*

Level of education	Frequency	Percentage
Inadequately completed elementary education	20,510	8.15
Completed (compulsory) elementary education	36,127	14.35
Incomplete secondary school: technical/vocational type/ (Compulsory) elementary education and basic vocational qualification	20,093	7.98
Complete secondary school: technical/vocational type/ Secondary, intermediate vocational qualification	49,189	19.54
Incomplete secondary: university-preparatory type/ Secondary, intermediate general qualification	22,260	8.84
Complete secondary: university-preparatory type/ Full secondary, maturity level certificate	43,111	17.12
Some university without degree/Higher education - lower-level tertiary certificate	19,210	7.63
University with degree/Higher education - upper-level tertiary certificate	41,299	16.40

Note. Table A4 shows the frequency of (inadequately) completion of certain levels of education among the respondents in the sample. Column 1 shows the number of respondents and Column 2 gives the percentages.

Table A5*Summary statistics of the United States in 2011*

	(1)	(2)	(3)	(4)
Variable	Mean	Standard deviation	Min	Max
Age	49.230	16.396	18	93
Gender	0.484	0.500	0	1
Education	6.797	1.241	1	8
Marital status	0.668	0.471	0	1
Social class	3.034	0.934	1	5
Children	0.297	0.457	0	1
Unemployed	0.923	0.267	0	1

Note. Table A5 shows the summary statistics for the United States in 2011. The sample consists of 2,157 observations. Column 1 shows the mean and Column 2 shows the standard deviation. Columns 3 and 4 show, respectively, the minimum and maximum value of the variables.

Table A6*Regression results for political and social conservatism*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent variable:	Political scale	Income inequality	Homosexuality justifiable	Abortion justifiable	Divorce justifiable	Housewife	Contribution to income
Unemployed	-0.013 (0.018)	-0.103*** (0.020)	-0.032* (0.018)	-0.041** (0.018)	-0.022 (0.019)	0.001 (0.006)	-0.003 (0.007)
Age	-0.001** (0.000)	-0.005*** (0.000)	0.021*** (0.000)	-0.012*** (0.000)	-0.014*** (0.000)	-0.003*** (0.000)	0.000 (0.000)
Gender	0.064*** (0.011)	0.124*** (0.012)	-0.310*** (0.010)	-0.026** (0.010)	-0.043*** (0.011)	-0.053*** (0.004)	0.108*** (0.004)
Education	-0.062*** (0.003)	0.084*** (0.003)	0.128*** (0.003)	0.109*** (0.003)	0.135*** (0.003)	0.025*** (0.001)	-0.007*** (0.001)
Marital status	0.061*** (0.014)	0.098* (0.015)	-0.053*** (0.013)	-0.070*** (0.014)	-0.317*** (0.015)	-0.029*** (0.005)	0.033*** (0.006)
Social class	-0.143*** (0.006)	-0.211*** (0.006)	-0.092*** (0.006)	-0.077*** (0.006)	-0.063*** (0.006)	0.005** (0.002)	-0.004 (0.002)
Children	-0.078*** (0.016)	-0.053*** (0.017)	0.094*** (0.016)	-0.019 (0.016)	-0.128*** (0.017)	0.021*** (0.005)	0.012* (0.007)
Constant	7.756*** (0.056)	5.676*** (0.061)	3.761*** (0.054)	4.973*** (0.054)	5.460*** (0.059)	2.287*** (0.019)	1.496*** (0.023)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	185,326	243,253	224,026	233,672	239,269	235,313	109,283

	(8)	(9)	(10)	(11)	(12)	(13)
Dependent variable:	Right to job	Political leaders	Importance university	Child suffers	Woman needs children	Woman as single parent
Unemployed	-0.033*** (0.006)	0.005 (0.006)	-0.036*** (0.006)	-0.010 (0.011)	0.006 (0.004)	-0.011 (0.007)
Age	0.003*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	0.002*** (0.000)	-0.002*** (0.000)	0.005*** (0.000)
Gender	0.232*** (0.003)	-0.281*** (0.004)	-0.228*** (0.004)	-0.089*** (0.006)	0.006** (0.003)	0.069*** (0.004)
Education	-0.047*** (0.001)	0.039*** (0.001)	0.048*** (0.001)	0.030*** (0.002)	-0.016*** (0.001)	-0.031*** (0.001)
Marital status	0.040*** (0.004)	-0.008* (0.005)	-0.000 (0.005)	-0.018** (0.008)	0.022*** (0.003)	0.051*** (0.005)
Social class	0.014 (0.002)	-0.009*** (0.002)	-0.014*** (0.002)	-0.027*** (0.003)	0.007*** (0.001)	0.004* (0.002)
Children	-0.024*** (0.005)	0.010* (0.005)	0.012** (0.005)	0.032*** (0.009)	-0.066*** (0.004)	0.019*** (0.006)
Constant	2.641*** (0.017)	2.655*** (0.019)	3.042*** (0.019)	2.279*** (0.034)	0.670*** (0.014)	1.958*** (0.020)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	247,696	237,791	242,509	75,980	107,958	160,773

Note. Table A6 shows the results of linear regression equation (1), with being unemployed as independent variable. Each column shows the results for a different dependent variable. Columns 1 and 2 use a dependent variable related to political conservatism, Columns 3-13 use a dependent variable related to social conservatism. Each regression includes year and country fixed effects. Standard errors are in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A7*Test for multicollinearity*

	(1)	(2)
Variable	VIF	1/VIF
Unemployed	1.10	0.911
Age	1.51	0.662
Gender	1.03	0.969
Education	1.35	0.739
Marital status	1.56	0.640
Social class	1.23	0.814
Children	1.88	0.531
Mean VIF	2.03	

Note. Table A7 shows the computed Variance Inflation Factors (VIF) for each variable included in linear regression equation (1). The variables for the years of the survey and the countries are left out to save space. Column 1 shows the computed VIFs and Column 2 shows the results of the tolerance computed by $1/\text{VIF}$. A VIF larger than 10 and a $1/\text{VIF}$ lower than 0.1 may indicate multicollinearity.