

Kaja Adelheid Bøyum Huus

Impact of crisis on populist attitudes in Europe: An empirical analysis

The peculiar case of Covid-19

Bachelor's thesis in European Studies

Supervisor: Anna Brigevidt

May 2023

Kaja Adelheid Bøyum Huus

Impact of crisis on populist attitudes in Europe: An empirical analysis

The peculiar case of Covid-19

Bachelor's thesis in European Studies
Supervisor: Anna Brigevid
May 2023

Norwegian University of Science and Technology
Faculty of Humanities
Department of Historical and Classical Studies



Abstract

This paper examines the link between populism and crisis. It aims to explore the relationship between contemporary populism and the Covid-19 crisis in Europe, by underscoring how the principal features of this relationship is a) The perception of governing powers that implemented science-based policy measures as the enemy and 2) how negative economic satisfaction relates to populist attitudes. Findings include that crisis, such as the Covid-19 crisis can lead to increased populist attitudes on an individual level. This is illustrated through obtained empirical data, which is analyzed upon by relevant literature on crisis and populism. Thus, the paper identifies *two causal paths*: 1) Lower political and institutional trust, specifically towards those that implemented evidence-based Covid-19 policy measures have higher potency of populist attitudes. 2) Economic anxiety, generally and crisis-led, causes populist attitudes in form of not trusting scientists and being skeptical towards the political system.

Sammendrag

Denne oppgaven tar for seg sammenhengen mellom populisme og kriser. Den tar sikte på å utforske (kausale) forhold mellom moderne populisme og Covid-19 krisen i Europa, ved å understreke hvordan hovedtrekkene i dette forholdet er a) Oppfatningen av styresmaktene som gjennomførte politiske tiltak basert på forskning og vitenskap under Covid-19 krisen som fienden og 2) Hvordan økonomisk angst er knyttet til populistiske holdninger. Funn i denne oppgaven stadfester at kriser, slik som Covid-19 krisen, kan føre til økte populistiske holdninger på individnivå. Dette er illustrert gjennom bearbeidet data hentet fra ESS, analysert i lys av relevant litteratur om krise og populisme. Oppgaven identifiserer således to årsakssammenhenger: 1) lavere politisk og institusjonell tillit, spesielt ovenfor de som implementerte evidensbaserte Covid-19 policy tiltak har høyere potens av populistiske holdninger. 2) Økonomisk angst, på en generell basis og kriseledet, forårsaker populistiske holdninger i form av å ikke stole på forskere og å være skeptisk til det politiske systemet.

Table of content

LIST OF TABLES	V
INTRODUCTION	6
LITERATURE AND CENTRAL DEFINITIONS	8
CRISIS MANAGEMENT, COVID-19, AND POPULISM	8
<i>The Volonté Générale versus the political elite - Populism defined</i>	8
<i>Populist attitudes defined</i>	9
<i>Left wing and right wing populism</i>	9
<i>The role of crisis in contemporary populism – a gordian knot?</i>	9
EUROSCEPTICISM, TRUST IN DEMOCRATIC INSTITUTIONS AND POPULISM	10
ECONOMIC (DIS)SATISFACTION AND POPULISM	10
METHOD AND METHODOLOGY	12
DATA - ESS10	12
RELIABILITY AND VALIDITY	12
VARIABLES.....	13
<i>Dependent variables - Y</i>	13
<i>Independent variables - X</i>	14
<i>By country</i>	14
EMPIRICAL RESULTS	16
DESCRIPTIVE STATISTICS	16
MULTIPLE LINEAR REGRESSION MODEL.....	16
ANALYZING AND INTERPRETING THE RESULTS	18
<i>Block 1: Institutional and political trust</i>	18
<i>Block 2: Economic explanations</i>	19
<i>Block 3: Control variables</i>	20
<i>Concluding thoughts and implications to the empirical findings</i>	20
CONCLUSION	21
REFERENCES/BIBLIOGRAPHY	24
APPENDICES	28

List of Tables

Table 1 Multiple linear regression model, Europe 16

Introduction

As frustration around the globe concerning the Covid-19 policy measurements, resulting in violent demonstrations and protests, the Covid-19 pandemic have further elevated questions about populism around Europe. Over the course of just a few months, the health crisis quickly spread across the world, and in response governments enacted policy responses such as closing non-essential businesses and schools, encouraging social distancing, and implementing some form of stay-at-home order (Bloem & Salemi, 2021). In Copenhagen, a doll of Prime Minister Mette Fredriksen was ignited by protesters, and in the Netherlands the police fought protesters in several places (Elster, 2021). *In which way can a crisis, such as the Covid-19 crisis lead to a rise in populist attitudes among the citizens in Europe?* Covid-19 created both economically and socially uncertainties in Europe, and this led some to be drawn towards extreme forums where science, political institutions and conspiracy theories flourished for citizens already frustrated with society (PST, 2021).

It is widely believed that populists benefit from crisis situations using the sense of a crisis to inject an urgency and an importance to their message (Pevehouse, 2020). Crisis are fertile ground for populist discourses as they can provide their interpretation of the causes of crisis, to distinguish the ordinary and common people from the elite, accountable for the status quo (Poli, 2016) However, the links between crisis and populism remains under-theorized and undeveloped (Moffitt, 2015, p.189). For this reason, my aim is to examine how well political trust and economic position can explain increasing populist attitudes. The thesis explores *how European citizens responded to the administration and handling of the COVID-19 crisis and furthermore, how can this relate to populist attitudes in Europe? Can discontent with the handling of the COVID-19 crisis lead to increase in populist attitudes on an individual level?*

Is the case of Covid-19 too peculiar to be linked to these conclusions about crisis and populism? Or can it be helpful to reach some conclusion about how European citizens react to crisis, and even more important to the measurements taken by governments and political institutions in the times of crisis? To analyze these issues, the thesis will consider theory on crisis, specifically looking at the management of the Covid-19 crisis. Pandemics differ from other types of crises in that there is no a priori political purpose to the crisis, or anyone with direct responsibility for the origin of it. But the presents of both decisive interventions, by the health-sector, governments and politicians, and public awareness leads the peculiar nature of Covid-19 into the definition of crisis (Bobba & Hubé, 2021). Thus, the distinction from other crises, such as the migrant-crisis or the Eurozone crisis, lies in the realms of politicization.

With this paper, I aim to contribute to the extant literature about crisis and populism, by characterizing a broader course of populist discontent, and link these to attitudes towards Covid-19 policy measurements. I will start out by addressing the literature on populism and crisis. Further, I will present data from the The European Social Survey (ESS) that will form the basis of the analysis to discuss *"in which way can a crisis, such as the covid19 crisis lead to a rise in populist attitudes among the citizens in Europe?"*. To grasp over these contemporary societal attitudes, I apply a statistical method of analysis, and the empirical data be used in a regression model to test four main hypotheses concerning the relationship between crisis and populist attitudes:

H1: Lower political and institutional trust, specifically towards those that implemented evidence based Covid-19 policy measures are assumed to have a higher score of populist attitudes.

H2: Dissatisfaction with the EU are assumed to have a causal relationship with populist attitudes.

H3: People who are dissatisfied with state's and/or household's economics are more likely to hold populist attitudes.

H4: People who have been negatively economically affected due to the Covid-19 crisis are assumed to have a higher potency of populist attitudes.

Literature and central definitions

Crisis management, Covid-19, and Populism

When analyzing the COVID-19 crisis in the light of populism, theoretical input on how crisis and populism relates to one another is necessary for the framework of the analysis. This section will try to provide this framework of analysis, by discussing literature on crisis and populism from a theoretical perspective. Although there has been some debate about the nature of the link between crisis and populism, the literature on the two phenomena has been widely associated with each other (Bobba & Hubé, 2021).

The term “crisis” has long history in the field of political philosophy and political science and is illuminated from different perspectives by theorists such as Karl Marx, Antonio Gramsci and Jurgen Habermas (Koselleck, 2006). For these classical theorists, a crisis is referred to as a critical conjuncture undermining state authority, thus offering an opportunity for change (Bobba & Hubé, 2021). A crisis needs to be subjectively perceived as phenomenon and is characterized by the discourse pushed forward by political actors and individuals. Colin Hay (2008) states that the concept of crisis is omnipresent within all social and political thought, and it remains the most “elusive, imprecise and generally unspecified concepts within the theoretician’s armoury”. Generally considered crisis can be temporary or permanent, cyclical, or one-off deviation from the natural course of events, and while normally there are solutions to crisis, they can also be unsolvable (Hay, 2008). Hay’s typology on crises includes the mention that crisis situations are dynamic processes, that may have different stages or facets (Bobba & Hubé, 2021). The Covid-19 crisis can be characterized as a compounded crisis, that affected many policy sectors, in almost all countries, which thus led it to require a transboundary response (Boin, McConnell & Hart, 2021).

The Volonté Générale versus the political elite - Populism defined

Populism has long been described in academia as an essentially contested concept, where controversy over the definitions is the intrinsic contention. There is currently much less controversy on how to define populism than in earlier periods, due to the large number of studies done on the topic (Akkerman, Mudde & Zaslove, 2014, p.9). The broader sense of consensus on how to define populism stems from abounding numbers of studies done more specifically in Europe and America, and the agreement is therefore that populism does not have the same face in every region. Latin-American populism for example, is left-wing, economic, and inclusive, while European populism on the other hand is right-wing, identity-based, and exclusionary (Mudde & Kaltwasser, 2013).

Mudde (2007, s.23) defines populism as a “thin centered ideology that considers society to be ultimately separated into two homogeneous and antagonistic groups, “the pure people” versus the “corrupt elite” and which argues that politics should be an expression of the *volonté Générale* (General will) of the people”. Further, we recognize populism as a thin-centered ideology, that travels across the political ideological spectrum as well as geographical regions (Akkerman et al., 2014, p.9). The fact that populism rarely exists on its own but attaches itself to political ideologies ranging from radical right to (neo-) liberalism, shows that context can influence what the *populist actor* focuses on (Akkerman et al., 2014, p.9). This shows why populism long have been an essentially contested concept, and the minimal definition used in this paper aims to achieve a

context-sensitive understanding of populism that still can contain the level of abstraction that it needs to travel across ideologies and regions (Sartori, 1970).

"The people" is at the very core and the heart of democracy, according to populists (Akkerman et al., 2014). As for the same in the liberal democracy, the people constitute the core and defining feature in society and are often referred to as the representative pillar (Mair, 2002; Mény & Surel, 2002). The difference however, between a liberal democrat and a populist, lays in the very specific understanding of the people. Populists view the people as sovereign, homogeneous, pure, and virtuous (Akkerman et al., 2014). "The people", are at subsequent contrast to the *elite* and they are often, in a Manichean manner, divided between the good and pure, and the evil and corrupt (Hawkins, 2009).

Populist attitudes defined

This paper is based on the above-mentioned definition of populism, and further, this paper aims to study populist attitudes in Europe, in relation to the handling of the Covid-19 crisis. How can a crisis, such as the covid-19 crisis, lead to populist attitudes among citizens in the EU? To answer this, it is necessary to clarify how populist attitudes are measured to best capture the full ideology of populism. This paper, as well as questions in the ESS round 10 focuses on the core elements of populism, namely the sovereignty of the people, opposition to the elite and the Manichean division between "good" and "evil" (Akkerman et al., 2014, p.8). Recent studies from the Netherlands (Rooduijn & Akkerman 2017) and elsewhere in the western part of Europe (Van Hauwaert & van Kessel, 2018) have shown that having these populist attitudes have a causal relationship with voting for populist parties, especially applicable for Europe (Hawkins, Kaltwasser & Andreadis, 2020). In the Covid-19 crisis, the antagonism between the populist world view and scientific evidence has been illustrated and identified as the source of populist vaccine hesitancy (Eberl, Huber & Greussing, 2021).

Left wing and right wing populism

The literature on populism predominantly points to immigration as the most prevalent mobilization issue for radical right parties, whereas radical left parties endorse socioeconomic redistribution (Hawkins, et al., 2020). This paper will mainly focus on the *right-wing populism*, because this is what we see most in Europe. However, it is fruitful to look at what distinguish the two directions, to get a bigger grasp of populism as a phenomenon. Populist parties have contributed to shaping the European party systems and altered the dynamics of party competition (Santana & Rama, 2018). This have in periods had profound impact on the increasing the levels of political polarization, electoral fragmentation, and electoral volatility (Santana & Rama, 2018). As a thin ideology, populism tends to be combined with other ideologies or ideological features, thus there exists both right and left-wing populists (Kaltwasser & Mudde, 2011). Studies that compare the two, include features in the left-wing populism that is most predominantly in Latin America as *economic* and *inclusive* whereas the literature on the European populism seems to agree that it is mostly right-wing, is chiefly ethnic *identity* based and is mostly *exclusive* (Akkerman et al., 2014).

The role of crisis in contemporary populism – a gordian knot?

Ernesto Laclau was one of the first scholars to link the rise of populism to crises and argued that populism simply could not emerge without a political crisis as a necessary precondition for populism (Laclau, 2005, p.117). He argues that historically, populism is

linked to a crisis of the dominant ideological discourse, which in turn is part of a more general social crisis (Laclau, 2005). Kriesi (2015) further links the current trends of populist in Europe to long term trends in political representation, describing that the opportunities for populist protests increases due to weakening of party democracy (Mair, 2002, p.88).

The literature on the topic can be divided into two sections. One that suggest that there *is* a link between crises and populism, and a second strand of which argues more cautiously about the link between the two phenomena. The relevancy of crises is more nuanced in this strand of literature, and emphasizes that crisis *can* be a facilitating factor, but is not necessarily a prerequisite for the rise of populism. Kaltwasser (2012, p.186) argues that this link between support of right-wing populist parties is stronger when one has a "liberal approach" to populism. Supporters of this strand approach populism as a pathology, and a reaction to the malfunctioning of democratic rule (Kaltwasser, 2012, p.186).

Euroscepticism, trust in democratic institutions and populism

Euroscepticism may consist of skeptical, cynical, or oppositional attitudes, specifically towards the different political targets and aspects of the European Union (Krouwel & Abts, 2007, p.252). Mass attitudes towards European integration and fixed views on the EU is not normally something that normal citizens keep (Krouwel & Abts, 2007, p.253). Can populism be capable of feeding into Euroscepticism in times of crisis? Franklin *et al.* noted in 1994 that "the anti-Europe bottle has been uncorked". What describes this, and how does it relate to the rise of populism? First, there are some similarities between right wing populism and Euroscepticism. When put in relation to the broader trend of contemporary politics, a *declining trust in democratic institutions* (Pharr and Putnam, 2000) and an increased mobilization of all kinds of cultural economic and political discontent brought forth by populist entrepreneurs, can be fruitful in describing the rise of Euroscepticism (Krouwel & Abts, 2007).

The link between the rise in populism and the rise in Euroscepticism is drawn by delving into the structure of political discontent, and the further effects on political trust. Blaming the EU is a well employed strategy by both old and new populist parties, especially utilizing crisis to validate long traditions of Euroscepticism (Poli, 2016; Goodwin, 2015, p.282). The political trust in this paper relates to how the government's handled the Covid-19 crisis, politically, economically, and socially. While populists emphasize that the existing political system is merely created for politicians, and therefore they can't be trusted, the complex and incremental nature of democratic decision-making is devoted little attention (Krouwel & Abts, 2007). The populist leader aims to transfer trust from the political system to the single individual person, often characterized by charismatic legitimacy instead of legal legitimacy, in Weberian terms (Krouwel & Atbs, 2007). Therefore, this thesis pose that *H1: Lower political and institutional trust, specifically towards those that implemented evidence based Covid-19 policy measures are assumed to have a higher score of populist attitudes.* In addition, *H2: Distrust with the EU are assumed to relate with populist attitudes.*

Economic (dis)satisfaction and populism

Covid-19 has moved into policy routine and governments are oscillating between economic, public health and preventive policy measures (Bobba & Hubé, 2021). The new

wave of populism emerged in Europe in 2009, arguably driven by the Great Recession and its economic consequences (Poli, 2016). Pappas and Kriesi's empirical comparative analysis on populism in the light of the Great Regression finds that "during the Great Recession populism in Europe increased notably by 4.1 per cent," (2015, p.323). The question on whether these 4.1 per cent were caused by temporal coincidence or indicates a real connection between the rise of populism and the economic crisis, have long been discussed upon by scholars (Poli, 2016). The latter, assuming that there *is* a link between crisis and populism are sustained by various arguments. Isolating economic factors in such an analysis can be close to impossible to achieve, however, the link between populism and economic crisis is well illustrated in comparative analyses (Poli, 2016). Pappas and Kriesi identifies the PIIG(G)S countries (Portugal, Ireland, Italy, Greece, Spain and sometimes included Great Britain with the addition of a second G to the acronym), and concludes that these countries, most heavily affected by the economic crisis, experienced a rise in the popularity of their populist parties (Pappas & Kriesi, 2015; Poli, 2016). This contrasts with the countries in respectively Northern and Central Western Europe (apart from France and Finland) that was not greatly affected by the crisis, and where the trends towards populism held a more moderate or even declining course (Poli, 2016). *H3: People who are dissatisfied with state's and/or household's economics are more likely to hold populist attitudes.* Further, *H4: People who have been negatively economically affected due to the Covid-19 crisis are assumed to have a higher potency of populist attitudes.*

Method and methodology

This thesis is based on a quantitative analysis, using *ordinary least squares* (OLS) regression as statistical model. Firstly, I have chosen this approach because I want to examine factors that influence formation of attitudes that provide a basis for populism. To answer the research question, this is done particularly in relation to crisis-management and Covid-19. A multiple regression is used to examine the relationship between the dependent variables, which measures populist attitudes, and the independent variables who aim to measure satisfaction with the Covid-19 measurements, institutional and political trust, and economy. A multiple linear regression in a blockwise manner is also conducted to study the impact of each explanatory block. Covid-19 has impacted all European countries, and thus serves as a good example of crisis that can affect the formation of populist attitudes. The regression run for all the countries that participated in the ESS10 and does not focus on any country specifically. This allows the paper to analyze whether the countries in Europe are characterized by a common culture, or does national differences explain more than other explanatory factors? These are causal explanatory models that can be analyzed using available attitude-data.

Data - ESS10

The European Social Survey is an academically driven cross-national survey of high quality, carried out every second year from 2002 (Ringdal & Wiborg, 2017). This is a relatively simple method that captures how groups of explanatory variables play out to and affect the dependent variables. The thesis bases its analysis on round 10 of the survey, ESS10. ESS is based on representative samples from each participating country, selected using random probability sampling (ESS, 2022). Each round consists of a core module and two additional thematic modules that vary in theme from round to round. ESS aims to monitor and interpret changing public opinions, attitudes, and values in Europe, and further to investigate how these public attitudes interacts with Europe's changing institutions (ESS, 2022) The tenth ESS round includes questions on a variety of core topics repeated from earlier rounds, and two modules that includes questions on "Digital Social Contacts in Work and Family Life" and "Understanding and Evaluations of Democracy" (ESS, 2022). The survey took place from September 2020, and the last fieldwork was finished in August 2022. ESS10 was carried out over a longer period than normal, because of the pandemic, and the time may be reviewed as particularly interesting and important for this round as the pandemic may have said to result in some attitudinal and behavioral changes. The analysis relies on data of around 21.000 individual European respondents.

Reliability and validity

High reliability is a prerequisite for high validity and refers to the consistency of obtaining the same results when measuring the same variables with the same measuring instrument (Ringdal, 2018, p.103). When assessing the reliability of the empirical data, it should be noted that, the ESS long has been held in high regards by academic spheres for its rigorousness in the definition of instruments, data collection and management. The data is transparent, can be downloaded by everyone after registration and lastly, the data produced by ESS is free and non-commercial. The external reliability is therefore considered high, as others can discover the same phenomenon and concepts in similar and relevant situations trough generating the accessible data.

Reliability is concerned merely with the empirical aspects of the analysis, whereas the model's validity requires a theoretical assessment, and must be considered within the theoretical context which the concept is employed (Ringdal, 2018). High validity means that the model and thesis are measuring what we intend to measure, in this case populist attitudes. I will discuss the validity of the models in light of the empirical findings. Populist attitudes can be challenging to measure, as the level of trust and satisfaction is quite subjective. However, including three variables as measurement for populist attitudes has been done to reach a validity as high as possible. All the dependent variables are based on relevant and carefully interpreted theories about populism and crisis management.

Variables

My dependent variables reflect different aspects of populist attitudes, as presented earlier in the paper. The sovereignty of the people, opposition to the elite and the Manichean division viewing the world in black and white, as well as trust in scientists as more directly linked to the Covid-19 crisis. They are based on the following questions from the ESS10: 1) "How important it is for democracy in general (...) that the views of ordinary people prevail over the views of the political elite?", 2) "How much would you say that the political system in (country) allows people like you to have an influence on politics?", and lastly the variable question 3) "Trust in scientists" (ESS10). These three questions are measured on an ordinal categorical scale. However, the causal analysis will be carried out assuming that they measure underlying attitude distributions on a ratio scale.

Dependent variables - Y

In the first question, regarding viewing of the democracy "How important it is for democracy in general (...) that the views of ordinary people prevail over the views of the political elite?" the respondent is asked to answer on a scale from 0-10 how important they think it is that the views of ordinary people prevail over the views of the political elite. The scale is ascending order, where the value 0 is not at all important for democracy in general, and 10 is extremely important for democracy in general. In this variable, the answers are coded so that the most "populist" answer is on the lower end of the scale: 0 = "extremely important for democracy", and "not at all important for democracy" is number 10. This scale might cause confusion for the reader and weaken the reliability, as it is against the standard to categorize what the paper aims to measure on the lower end of the scale. The variable is recoded so that the options "refusal", "don't know" and "no answers" are removed.

The next question I use to measure populist attitudes in this paper focuses on influence and the respondents' views and attitudes on democracy and influence. "How much would you say that the political system in (country) allows people like you to have an influence on politics?" has five alternative answers: 1="not at all", 2= "very little", 3= "some", 4= "a lot" and lastly 5= "a great deal". The variable is also recoded so that the missing values "refusal", "don't know" and "no answers" are taken out of the model.

Lastly, the question about "trust in scientists" are included in this thesis as dependent variable in its relevancy specially to the COVID-19 crisis. As explained earlier, the peculiar nature of the COVID-19 crisis differs from other crises which are mostly political. On a score from 0-10, respondents are asked to answer how much they personally trust scientist. 0 means they have no trust at all, and 10 means they have complete trust

(ESS, 2022). The variable is recoded, and missing values "refusal", "don't know" and "no answer" is removed from the model.

Independent variables – X

The independent variables are divided into three different groups. The first I call "Institutional and political trust and satisfaction" are combined by three variables, namely: "trst_ep1" (Trust in European Parliament), which on a scale from 0-10, respondents are asked to rank their trust from "no trust" as 0, and "complete trust" as 10. In addition to signaling trust in politics in general, this relates to the characteristic Euroscepticism of European populism, opposition to globalization and supranational decision-making institutions that represents the political elite. The next IV in this group is "trust_govt19 (To what extent trust the government to deal with the impact of COVID-19), on a scale from 0-10 where 0 is "no trust" and 10 is "complete trust". Lastly, the variable "satisfied19" (How satisfied with the government's handling of Covid-19 in country) are included to measure satisfaction with the political institutions in times of crisis. Missing values, "refusal", "don't know" and "no answer" are removed from all the variables.

Economic (dis)satisfaction should, in the model help explain why some people gain more populist attitudes, also in times of crises, and hence my second block of explanatory variables are called "Economic explanations". The block consists of three variables: "income_feeling", "income_reduce19" and "satisfied_economy".

The first variable "income_feeling" asks the respondent to answer on "feeling about household's income nowadays". There are 4 possible answers when removing missing values, 1) "Living comfortably on present income", 2) "Coping on present income", 3) "difficult on present income" and lastly 4) "Very difficult on present income". The variable is categorical on ordinal level, but is treated as a ratio scale, based on an underlying continuous distribution of attitudes. Further, in the question "income_reduce19", the survey asks, "things happening since start of COVID-19: income from job was reduced". Here, the respondents either marks or does not mark, making it a numerical variable from the start. The responds are dummy coded so that "marked"=0 and "not marked"=1. Lastly, the variable "satisfied_economy" measures "how satisfied (respondents are) with present state of economy in country". The score runs from 1) "extremely dissatisfied" to 10) "extremely satisfied". Missing values, "refusal", "don't know" and "no answer" are removed from all the variables.

The last block in my model are control variables, or Z-variables. These include "age", "gender", "religion" and "education". Age measures numerically from 15 to 90 years old. The "Gender" variable has two alternative answers, "male" or "female" and the variable is dummy-coded so that 0="male" and 1="female". "Religion" is a yes-or no question on whether or not respondents are religious, recoded so that 1="yes" and 0="no". "Education" measures years of education that respondents have completed, and ranges from 0-55 years. All missing values are removed from the models.

By country

Country is a category- or factor variable. The last part of the model serves the regression coefficients for each country that participated in the survey. If all the regression coefficients for the countries are significant, that means that country provides a statistically significant addition to the model. By including the country variable, I can

examine the other explanatory variables regardless of national differences, and whether patterns in the model represent general laws for political attitude formation rather than random outcomes of the individual countries included in the analysis. It is natural to expect significant national differences, and the representation in the governments at the time will have an influence on conditions such as trust in the authorities and views on representations. This, however, lies outside of the thesis' realms, and will not be further discussed, but is an interesting case for further research on the theme. To check if the category-variable "country_numeric" contributes significantly to the model, I utilize the simplest contrast commando, "contrast". The model shows that the test observer $F=43,48$ with 15 and 25200 indicates very low significance probability (0.0000). This is a selection of countries that covers much of Europe and of the variation in populist expression. For example that right and left populist parties are particularly strong today in some of the countries, including Hungary, France, Italy and Greece.

Empirical results

Descriptive statistics

Descriptive statistics: Countries' score on populist attitudes

The model illustrates that trust in scientists are roughly the same in all significant countries, generally high trust. With 8,02 in mean Iceland comes out on top with the highest levels of trust in scientists, together with Finland, The Netherlands and Portugal (ESS, 2022). The model shows that North Macedonia, Slovakia, and Bulgaria has the lowest mean on whether they trust scientists or not, with roughly 6 in mean. The statistical mean for all significant countries under the trust in scientists- variable in my model is 7,03, which is high given that the maximum value is 10.

Populist ideology relies heavily upon the importance of ordinary people, and their views. The ordinary-views variable is therefore an important part of my populist index. The lower values each country has, the more important the statement is. The number indicates that Slovenia, Greece, Croatia, and Norway have the lowest mean, and finds it most important for the ordinary views to prevail over the views of the political elite. The countries with the highest mean, The Netherlands, Switzerland, and Iceland finds it least important of all the countries. The total mean on all countries under the ordinary views-variable is 2.33 on a scale from 0-10. The weak explanatory power this model holds, implies a decreased validity in the analysis. Furthermore, the model shows that the dependent variables have a skewed distribution, where the most people score low on the views-variable, in comparison to the trust in scientists- and the influence variable. This does therefore not mean that all the people that scores low on this question have populist attitudes, but rather that this variable taps more into the theme of democracy, and not populism.

Confidence in the political system and that it allows people to have an influence in politics is an important part of populist attitudes. Here, we see an overall lower mean because the variation is from 1-5 instead of 1-10 as the other dependent variables. Lower values represent lower trust in that the political system allows "normal" people to have a say in politics, and Bulgaria, Italy, and Croatia scores with a mean on around 1.60. On the other side, Norway, Finland, and Iceland have a higher mean of people who believe that the political system allows people to have an influence in politics, with the means: 3,04 2,75 and 2,71. The total mean in this variable is 2,09.

Multiple linear regression model

Table 1 Multiple linear regression model, Europe

	Model 1	Model 2	Model 3
	Views of the people prevail over political elite	Political system allows people to have influence on politics	Trust in science
<i>Political and institutional trust</i>			
Trust in European Parliament	-.014*(.006)	.055***(.002)	.372***(.005)

Trust in government's handling of Covid-19	-.035***(.008)	.040***(.003)	.077***(.008)
Satisfied with government's handling of Covid-19	.0004*(.008)	-.002(.003)	.043***(.007)
<i>Economic explanations</i>			
(negative) Feeling about household's income	.087***(.019)	-.064***(.007)	-.054**(.018)
Income from work reduced due to Covid-19	.050(.046)	.052**(.018)	-.169***(.045)
How satisfied with state's economy	-.053***(.007)	.048***(.003)	.012(.007)
<i>Control variables</i>			
Age	.000(.001)	-.004***(.000)	.003***(.001)
Years of education	-.007*(.004)	.033***(.001)	.035***(.003)
Gender (1=kvinne 0=mann) dummy	.124***(.027)	-.087***(.010)	-.091***(.025)
Religious (1=religious 0=ikke religiøs) dummy	.086**(.031)	.008(.012)	-.025(.029)
Country_numeric (Bulgaria as basis country)			
CH	-.278***(.081)	.090***(.031)	.094(.072)
CZ	.037(.069)	.104***(.027)	.
EE	-.302***(.077)	.135***(.030)	.
FI	.055(.075)	.624***(.029)	.552***(.067)
GR	.231***(.061)	.118***(.024)	.819***(.054)
HR	.471***(.073)	-.081**(.028)	-.009(.065)
HU	.373***(.071)	-.006(.028)	-.356***(.063)
IS	-.305**(.098)	.491***(.038)	.626***(.087)
IT	-.179**(.064)	-.177***(.025)	.417***(.057)
LT	-.265***(.075)	.070*(.029)	.546***(.066)
MK	-.110(.075)	.213***(.029)	-.143*(.067)
NL	-.874***(.080)	.469***(.031)	.376***(.071)
NO	.669***(.083)	.783***(.032)	-.024(.075)
PT	-.233***(.073)	.078**(.028)	.641***(.065)

SI	.487***(.079)	.107***(.031)	.595***(.071)
SK	-.043(.077)	.178***(.030)	.049(.068)
Constant	8.042***(.103)	1.147***(.039)	3.849***(.097)
N	25.227	25.496	22.165
R-Squared	0.05	0.30	0.30
P-Value	0.00	0.00	0.00

Included in the table is the regression coefficient, the significant of the variables and the standard error. The regression coefficient is the first number in each row and should be interpreted as the change in the dependent variable by changing the value of the independent variable by one unit, controlling for all other factors in the model (Ringdal, 2018). For most of the coefficients in the model, the effects are relatively small, even if they are significant. The P-value is represented by the stars, where *** $p < .001$; ** $p < .01$; * $p < .05$. Followed by the standard error in the parenthesis.

Analyzing and interpreting the results

All the models are statistically significant and show a positive correlation between the model as a whole and the populist attitudes measured by "views of ordinary people prevail over the political elite", "political system allows people to have influence on politics" and "trust in scientists". The first model, that measures the importance of people's views prevailing over political elites, have a relatively low explanatory power with only 0.05 R-squared. The combination of a statistically significant model but a low R-squared value his indicates that the independent variables are correlated with the dependent variable, but a linear model does not explain much of the variability in the dependent variable. Thus, the model is carefully interpreted, underscoring that the low R-squared values can warn of imprecise prediction, and therefore decrease the validity of this variable. The models on trust in the political system and trust in scientists however holds strong explanatory power. So, with help from the model, can we possibly say something about *how European citizens responded to the administration and handling of the Covid-19 crisis on a general level, and how this further can relate to populist attitudes in Europe? Is there a clear link between discontent with the handling of the Covid-19 crisis and an increase in populist attitudes on an individual level?*

Block 1: Institutional and political trust

The literature emphasizes that trust in political institutions have a correlation on whether the respondent feels like the political elites' views prevail over the people. Can we further see this correlation in the models? The first block of independent variables aims to examine this political and institutional trust, with a focus on the covid-19 crisis. When running a multiple regression with a blockwise manner we see that political and institutional trust have relatively high explanatory power on two of the variables aiming to measure populist attitudes, but lower explanatory power on the first variable. Political and institutional variables have an R-squared on 0.008 in the views- model measuring how important it is for the views of ordinary people to prevail over the political elite. This is relatively small. Further, they have a higher R-squared on the influence on politics

model with 12.80, and lastly an even higher R-squared of 26.40 in the model measuring trust in scientists.

The model indicates that the more *trust respondents had to the EP*, the more likely they are to think that the views of the people should prevail over the political elite. However, the model also suggests that the more you trust the EP, the more you think that the political system allows for your voice to be heard, and that increased trust in EP correlates positively with trust in scientists. People with more *trust in government's handling of the Covid-19 crisis* are assumed to find it more important that the people's views prevail over the political elites' views. The more trust in governments Covid-19 policy approach also correlates with thinking that the political system allows ordinary people to have an influence in politics, and increased trust in scientists. The model suggests that the more *satisfaction with the government's handling of the Covid-19 crisis*, the more trust in scientists' respondents have. There is no significant relationship between satisfaction with the governments Covid-19 approach and if one thinks that the political system allows ordinary people to have influence in politics, and the coefficient is positive, but very low in whether respondents think it is important that the views of ordinary people prevail over the political elite.

Populists view the people as the subsequent contrast to the elite and are often in Manichean manner divided between the good and pure people and the evil and corrupt elite (Hawkins, 2009; Mudde, 2004). Further, the relationship between right wing populism and Euroscepticism emphasizes a declining trust in democratic institutions, and where populist entrepreneurs bring forth increased mobilization of cultural, economic, and political discontent (Krouwel & Atbs, 2007). People with populist attitudes accentuate that the political system is created for politicians and can therefore not be trusted (Krouwel & Atbs, 2007). Based on literature on political trust and populism, the thesis poses *H1: Lower political and institutional trust, specifically towards those that implemented evidence based Covid-19 policy measures are assumed to have higher score of populist attitudes. Additionally, H2: Distrust with the EU are assumed to correlate with populist attitudes.* Does this unfold in the model? The data confirms the two hypotheses, showing a causal relationship between trust in the European Parliament, governments handling of the Covid-19 crisis and satisfaction with the government's handling of the Covid-19 crisis, and populist attitudes. "Satisfaction with the government's handling of Covid-19" is only statistically significant in the last model, making it inconceivable to generalize this to the population. In the model that measures if respondents find it important that the *views of ordinary people prevail over the political elite* the political trust block has an R-squared on 0.008 when running the regression in a blockwise manner, making this a relatively weak model. The model nevertheless supports the theoretical argument that institutions that represent the established political order, to which populists oppose themselves, are more skepticized by people with populist attitudes. Even if the Covid-19 responses of these institutions sometimes be hesitant and inconsistency, they had played a central role in mitigating the impact of Covid-19 (Eberl, Huber & Greussing, 2021).

Block 2: Economic explanations

Economic explanations have been given much consideration in literature on populism, and my model illustrates that there is a causal relationship between economic (dis)satisfaction and populist attitudes. Generally, economic anxiety has been theorized

by academics and public debaters and is associated with the “losers of globalization” thesis that holds that economic transformations, generally associated with “neoliberal globalization” have created “left behinds”, that were classified as the losers of this globalization (Mudde & Kaltwasser, 2018). This thesis goes back decades, with academic work like Lipset’s “Status politics thesis” (1955) and Gellner’s (1983) “modernization theory”, seeking to explain nationalism and the radical right, and have later moved on to the populist literature as well (Mudde & Kaltwasser, 2018). How does this reveal in the regression model?

The worse respondents *feel about their household income*, the more they say it is important for democracy that the voice of the people prevails over the political elite. This negative feeling of household income also correlates with thinking that the political system does not allow ordinary people to have an influence on politics, and a declining trust in scientists. Respondents who had their *income from work reduced due to Covid-19* had more confidence in that the political system allows ordinary people to have an influence in politics, however, also had less trust in scientists. The more *satisfied respondents were with the economic state in their country*, the more they were inclined to say that it was important for democracy that the will of the people prevails over the political elite. The more satisfied with the economy, the more likely it was that they also felt like the political system allows people to have an influence in politics. The presented literature on crisis underscores the importance of economics when it comes to crisis and the increased populism (Pappas & Kriesi, 2015; Poli, 2016; Bobba & Hubé, 2021). The data confirm hypothesis H3 and H4 about the role that economic anxiety plays in the rise of populist attitudes. However, this is more nuanced due to the low explanatory power the first model holds, and that two of the variables are not statistically significant to generalize to the population.

Block 3: Control variables

Control variables, are included to rule out that the correlation between independent variables and the dependent variable is not due to third variables, omitted from the analysis. The Z-variables are age, how many years of completed education respondents have, gender and if respondents are religious. The model indicates that *older people* were more likely to think that the system did not allow their influence to reach politics. However, a positive correlation between age and trust in scientists tells us that older people are more likely to trust scientists. The more *years of completed education respondents* had, the more likely they were to say that in a democracy, the voice of the people should prevail over the voice of the political elite. More completed years of education also correlated with thinking that ordinary people can influence politics, and an increased trust in scientists. The model suggest that *women* were less likely to think that the views of ordinary people should prevail over the political elite, and that women were less likely to say that they have an influence in politics, as well as they had less trust in scientists. Lastly, *religious people* were less likely to think that the ordinary people’s views should prevail over the political elite.

Concluding thoughts and implications to the empirical findings
Crisis, such as the Covid-19 crisis can lead to increased populist attitudes on an individual level. This is illustrated through the empirical data implying that people that more trust in political institutions, both on a European level and national, the more positive respondent were in the political system and trusted scientists more. The data

thus confirms H1: *Lower political and institutional trust, specifically towards those that implemented evidence based Covid-19 policy measures are assumed to have a higher score of populist attitudes.* Further, the more trust in the European Parliament, the less likely it was that respondent had populist attitudes, and therefore H2: *Dissatisfaction with the EU are assumed to have a causal relationship with populist attitudes* is confirmed by the model. In relation to Covid-19, the more respondents trusted and were satisfied with their governments' approach to the crisis, the less populist attitudes they possessed. This shows that *discontent with the handling of the COVID-19 crisis can lead to an increase in populist attitudes on an individual level.* The analysis indicates that respondents with a negative position on the household's and the state's economy, had higher potency of populist attitudes, confirming H3: *People who are dissatisfied with state's and/or household's economics are more likely to hold populist attitudes.* The last hypothesis H4: *People who have been negatively economically affected due to the Covid-19 crisis are assumed to have a higher potency of populist attitudes* did not show a significant causal relationship with skepticism towards the political system, but respondents that were affected also were likely to not trust scientists.

Conclusion

Based on the review of populism and populist attitudes, specially related to crisis, as well as empirical documentation on populist attitudes in relation to political and institutional trust, economic position, and satisfaction with the handling of the Covid-19 health crisis, it is time to draw some cautious conclusions about the link between the Covid-19 crisis and populism. First, it is necessary to point out that I have based the analysis on a minimal definition of populism, as a thin-centered ideology that travels across the political ideological spectrum, as well as geographical regions (Akkerman et al., 2014, p.9). This understanding of populism allows the paper to achieve a context-sensitive definition on populism that further contains a certain level of abstraction to it, enough for it to travel across ideologies (Sartori, 1970).

To capture and identify patterns and regularities in society, in this thesis relating to populist attitudes and crisis management, the statistical method is the most fitting in analyzing if *discontent with the handling of the COVID-19 crisis could lead to increase in populist attitudes on an individual level.* A linear relationship between the variables should be detected by running an OLS-regression analyses. The data is collected from the European Social Survey and the results are analyzed using STATA. The model combined three populism questions, with variables that measure respondents feeling about the political system, the political elite vs. ordinary views, and lastly their trust in scientists.

The relation between populism and crisis seems to be intuitive: crisis breeds populism and populism stokes crisis. Does this reveal itself in the models? This paper's main arguments relate to the link between respondents' understanding and trust in political institutions, feelings about economics, and satisfaction with the governments approach to the Covid-19 health crisis. Based on the findings and the theory that has been discussed in the thesis, it is now time to draw some conclusions about How a crisis, such as the Covid-19 crisis can lead to increased populist attitudes on an individual level. Further how citizens from several European countries responded to the administration and handling of the Covid-19 crisis on a general level, and how this can relate to populist attitudes on the continent. Did discontent with the handling of the COVID-19 crisis could lead to increase

in populist attitudes on an individual level? H1, H2 and H3 were confirmed by the model, while the last hypothesis about personally being economically negatively affected by Covid-19 did not cause an increase in populist attitudes but showed lower trust in scientists.

Crisis, such as the Covid-19 crisis can lead to increased populist attitudes on an individual level. This is illustrated through the empirical data implying that people that had more trust in national and European political institutions and had a positive position on the states and household economy were less likely to have populist attitudes.

Thus, the paper identifies *two causal paths*: 1) Lower political and institutional trust, specifically towards those that implemented evidence-based Covid-19 policy measures have higher potency of populist attitudes. 2) Economic anxiety, generally and crisis-led, causes populist attitudes in form of not trusting scientists and being skeptical towards the political system. The latter, however, does not have a causal relationship with having income from work reduced. This is furthermore nuanced due to some weaknesses in the statistical model. The validity is therefore evaluated carefully in the analysis, and the thesis highlight challenges in estimating a robust causal relationship. While the study finds some interesting correlations between satisfaction/trust with the governments' handling of Covid-19 and populist attitudes, it is less clear whether the model, in fact, is measuring populist attitudes per se. A very high number of respondents that agree with the first "populist" measure, "views" seem to indicate that this is rather tapping into broader thoughts on democracy sentiments. However, the two remaining measures influence-variable and the trust in scientist-variable show a strong causal relationship with the independent variables.

A few clarifications about the paper are in order. First, populist attitudes and populism may be too complex and contested a term for what I am discussing in this paper (Mudde, 2011). The paper relies on academic literature about populism and crisis, which I have further utilized to compile a populism-index in STATA, but subjective themes such as satisfaction and trust and perception of democracy makes it even more important to keep in mind the validity of the variables. Second, I do not discuss movements, parties, or leaders. Rather, I am concerned with a certain group of features and attitudes that I, based on presented relevant literature, argue can be characterized as important dimensions of populism. Third, I focus on populist attitudes among European citizens. Some of the thesis' themes have parallels elsewhere, such as in America, however, this lays outside the scope of the thesis. Much of the arguments in this paper reflects distinctiveness of the European experience of the Covid-19 health crisis, and the salience of Euroscepticism, anti-elitism, and the shift in the European political landscape.

Further, it would be interesting to assess the findings in the analysis in relation to political party alignment. In my paper, I have only examined attitudes which form the basis for political action, and a natural way forward would be to analyze this in the light of actual political behavior. This is not necessarily expected to be a linear relationship because of the variations in European countries, further in relation to the strength of populist movements in these respective countries. How the representation in national governments can influence on conditions such as trust in the political authorities and views on representations also makes an interesting case for further research on the topic.

References/Bibliography

Akkerman, A., Mudde, C., & Zaslove, A. (2014). How populist are the people? Measuring populist attitudes in voters. *Comparative political studies*, 47(9), 1324-1353.

Becker, M., & Gehring, T. (2022). Explaining EU integration dynamics in the wake of COVID-19: a domain of application approach. *Journal of European Public Policy*, 1-20.

Boin, A., McConnell, A., & t Hart, P. (2021). *Governing the pandemic: The politics of navigating a mega-crisis* (p. 130). Springer Nature.

Bloem, J. R., & Salemi, C. (2021). COVID-19 and conflict. *World development*, 140, 105294.

Bobba, G., & Hubé,, N. (2021). COVID-19 and populism: a sui generis crisis. In *Populism and the politicization of the COVID-19 crisis in Europe* (pp. 1-16). Cham: Springer international publishing.

Eberl, J. M., Huber, R. A., & Greussing, E. (2021). From populism to the "plandemic": why populists believe in COVID-19 conspiracies. *Journal of Elections, Public Opinion and Parties*, 31(sup1), 272-284.

Elster, K. (2021, 24/01). Opptøyer mot koronatiltak flere steder i Europa. *Nrk*. From: <https://www.nrk.no/urix/opptoyer-mot-koronatiltak-flere-steder-i-europa-1.15343236>

European Social Survey European Research Infrastructure (ESS ERIC). (2022). ESS10 - integrated file, edition 2.1 [Data set]. Sikt - Norwegian Agency for Shared Services in Education and Research. <https://doi.org/10.18712/ess10>

European Social Survey European Research Infrastructure (ESS ERIC). (2022). ESS10 Data Documentation. Sikt - Norwegian Agency for Shared Services in Education and Research. <https://doi.org/10.21338/NSD-ESS10-2020>

Hawkins, K. A. (2009). Is Chávez populist? Measuring populist discourse in comparative perspective. *Comparative political studies*, 42(8), 1040-1067.

Hawkins, K. A., Kaltwasser, C. R., & Andreadis, I. (2020). The activation of populist attitudes. *Government and Opposition*, 55(2), 283-307.

Hay, C. (2008). Crisis and the structural transformation of the state: interrogating the process of change. *The British journal of politics & international relations*, 1(3), 317-344.

Jelster,2021 <https://www.nrk.no/urix/opptoyer-mot-koronatiltak-flere-steder-i-europa-1.15343236>

Koselleck, R., & Richter, M. W. (2006). Crisis. *Journal of the History of Ideas*, 67(2), 357-400.

Kriesi, H., & Pappas, T. (2015). *European populism in the shadow of the Great Recession*. ECPR Press.

Krouwel, A., & Abts, K. (2007). Varieties of Euroscepticism and populist mobilization: Transforming attitudes from mild Euroscepticism to harsh Eurocynicism. *Acta politica*, 42, 252-270.

Laclau, E. (2005). *On populist reason*. Verso.

Mair, P. (2002). Populist democracy vs party democracy. *Democracies and the populist challenge*, 81-98.

Mény, Y., & Surel, Y. (2002). The constitutive ambiguity of populism. *Democracies and the populist challenge*, 1-21.

Moffitt, B. (2015). How to perform crisis: A model for understanding the key role of crisis in contemporary populism. *Government and Opposition*, 50(2), 189-217.

Mudde, C. (2007). Populist radical right parties in Europe.

Mudde, C., & Kaltwasser, C. R. (2011). *Voices of the peoples: Populism in Europe and Latin America compared*. South Bend, Indiana: Helen Kellogg Institute for International Studies.

Mudde, C., & Kaltwasser, C. R. (Eds.). (2012). *Populism in Europe and the Americas: Threat or corrective for democracy?*. Cambridge University Press.

Mudde, C., & Kaltwasser, C. R. (2013). Exclusionary vs. inclusionary populism: Comparing contemporary Europe and Latin America. *Government and opposition*, 48(2), 147-174.

Mudde, C., & Rovira Kaltwasser, C. (2018). Studying populism in comparative perspective: Reflections on the contemporary and future research agenda. *Comparative political studies*, 51(13), 1667-1693.

Pappas, T. S., & Kriesi, H. (2015). Populism and crisis: A fuzzy relationship. *European populism in the shadow of the great recession*, 303-325

Pevehouse, J. C. (2020). The COVID-19 pandemic, international cooperation, and populism. *International Organization*, 74(S1), E191-E212.

Poli M. D. (2017). CONTEMPORARY POPULISM AND THE ECONOMIC CRISIS IN WESTERN EUROPE. *Baltic Journal of Political Science*, (5), 40-52.
<https://doi.org/10.15388/BJPS.2016.5.10335>

Politiets sikkerhetstjeneste. (2021). Nasjonal trusselvurdering 2021. From: <https://www.pst.no/alle-artikler/trusselvurderinger/nasjonal-trusselvurdering-2021/>

Ringdal, K., & Wiborg, &. (2017). Lær deg Stata: Innføring i statistisk dataanalyse. Bergen: Fagbokforlaget.

Ringdal, K. (2018). Enhet og mangfold:: Samfunnsvitenskapelig forskning og kvantitativ metode (4. utg. ed.). Bergen: Fagbokforlaget.

Rooduijn, M., & Akkerman, T. (2017). Flank attacks: Populism and left-right radicalism in Western Europe. *Party Politics*, 23(3), 193-204.

Sartori, G. (1970). Concept misinformation in comparative politics. *American political science review*, 64(4), 1033-1053.

Santana, A., & Rama, J. (2018). Electoral support for left wing populist parties in Europe: addressing the globalization cleavage. *European Politics and Society*, 19(5), 558-576.

Van Hauwaert, S. M., & Van Kessel, S. (2018). Beyond protest and discontent: A cross-national analysis of the effect of populist attitudes and issue positions on populist party support. *European Journal of Political Research*, 57(1), 68-92.

Appendices

Model 1. Descriptive statistics: Countries' score on populist attitudes

Country	Trust in scientists	Ordinary people's views' prevail over political elite	Influence on politics
BG	6,33	2,11	1,69
CH	7,12	2,85	2,96
CZ	.	2,28	2,00
EE	.	2,75	2,12
FI	7,84	2,44	2,75
FR	.	2,57	2,10
GR	7,32	1,95	1,89
HR	6,49	1,77	1,71
HU	6,61	1,94	1,90
IS	8,02	2,81	2,71
IT	7,09	2,53	1,69
LT	7,17	2,55	1,93
ME	.	2,65	1,92
MK	6,16	2,21	1,87
NL	7,50	3,39	2,61
NO	7,46	1,95	3,04
PT	7,47	2,06	1,87
SI	7,14	1,87	2,01
SK	6,29	2,22	1,94
Total:	7,03	2,33	2,09

Descriptive statistics – Dependent variables

	N	Min	Max	Mean	Std. Dev.
How much influence in politics	24,965	1	5	2,12	0,97
Views of ordinary people prevail over views of political elite	25,227	0	10	2,29	2,13
Trust in scientists	21,672	0	10	7,07	2,21

Descriptive statistics – Independent variables

Continuous variables	N	Min	Max	Mean.	Std. Dev.
Trust in EP	25,227	0	10	4,84	2,54
Trust in government's handling of Covid-19	25,227	0	10	5,26	2,58
Satisfied with handling of Covid-19	25.227	0	10	5,34	(0)2.57
Feeling about household's income	25,227	1	4	2,99	0,83
Income from job has reduced due to Covid-19	25,227	0	1	0,90	0,28
How satisfied with state's economy	25,227	0	10	4,85	2,50
Age	25,227	15	90	50,23	17,80
Education	25,227	0	55	13,12	3,96

Dummy variables: (finn ut hvordan man skal gjøre dette)

	N	Min	Max	Freq.	Freq.
Gender	25,227	0	1	1	0,49
Religion	25,227	0	1	0,38	0,48

Bachelor dofile – STATA

```
use "/Users/kajahuus/Downloads/ESS10.dta/ESS10.dta", clear
```

```
*BACHELOR IN EUROPEAN STUDIES, SPRING 2023*
```

```
*Preparing the variables*
```

```
*Rename variables*
```

```
rename viepol views // DV  
rename psppipla influence // DV  
rename trstsci science_trust // DV
```

```
*BLOCK 1: Trust in institutions - COVID-19
```

```
rename trstep trust_ep // IV  
rename gvimpc19 trust_govt19 // IV  
rename gvhanc19 satisfied19 // IV
```

```
*BLOCK 2: Economic explanations*
```

```
rename hincfel income_feeling // IV  
rename hapirc19 income_reduce19 // IV  
rename stfeco satisfied_economy //IV
```

```
*BLOCK 3: Control variables*
```

```
rename agea age  
rename gndr gender  
rename rlgblg religion  
rename eduyrs education
```

```
rename cntry country // all of the variables
```

```
*preparation of y-variables*
```

```
tab views, missing
```

```
recode views (12. 13. 14.=.), gen(views1) // remove refusal, missing values and "dont know"
```

```
recode views1 (0=10) (1=9) (2=8) (3=7) (4=6) (5=5) (6=4) (7=3) (8=2) (9=1)  
(10=0), gen(views2) //Reverse the order so that the most "populist" *extremely  
important for democracy* has the lowest value
```

```
tab influence, missing
```

```
recode influence (6. 7. 8.=.), gen(influence1) // remove refusal, missing values and  
"dont know"
```

```
tab science_trust, missing
```

```
recode science_trust (12. 13. 14.=.), gen(science_trust1)
```

```
*Preparation of x-variables*
```

```
//Trust in institutions
```

```

tab trust_ep, missing
recode trust_ep (12. 13. 14.=.), gen(trust_ep1)

tab trust_govt19, missing
recode trust_govt19 (12. 13. 14.=.), gen(trust_govt19_1)

tab satisfied19, missing
recode satisfied19 (12. 13. 14.=.), gen(satisfied19_1)

//Economic explanations

tab income_feeling, missing
recode income_feeling(5. 6. 7.=.), gen(income_feeling1) //remove refusal, missing
values and "dont know"
recode income_feeling1 (1=4) (2=3) (3=2) (4=1), gen(income_feeling2) //Reverse the
order so that living comfortably on present income has the highest value

tab income_reduce19, missing
tab income_reduce19, nolabel // find that 0=not marked and 1=marked
recode income_reduce (0=1) (1=0), gen(income_reduce19_1) // reverse the order so
that not marked has the highest value

tab satisfied_economy, missing
recode satisfied_economy (12. 13. 14.=.), gen(satisfied_economy1) // remove refusal,
missing values and "dont know"

//Control variables
tab age, missing
recode age (76.=.), gen(age1) //remove refusal, missing values and "dont know"

tab gender, missing
recode gender (1=0) (2=1), gen(gender1) //dummycode variable so that 0=man, and
1= woman

tab religion, missing
recode religion (3. 4. 5.=.), gen(religion1) //remove refusal, missing values and "dont
know"
recode religion (1=0) (2=1), gen(religion2) //dummycode so that 0 is religious and 1 is
not religious

tab education, missing
recode education (42. 43. 44.=.), gen(education1) //remove refusal, missing values and
"dont know"

tab country
tab country, nolab
encode country, gen(country_numeric) //making the country
tab country_numeric
tab country_numeric, nolab

```

Descriptive statistics

//Institutional and political trust

sum trust_ep1 trust_govt19_1 satisfied19_1 b10.country_numeric

//Economic explanations

sum income_feeling2 income_reduce19_1 satisfied_economy1 i.country_numeric

//Control variables

sum age1 gender1 religion1 education1 i.country_numeric

***** LINEAR REGRESSION *****

multiple regression

nestreg:regress views2 (trust_ep1 trust_govt19_1 satisfied19_1 income_feeling2
income_reduce19_1 satisfied_economy1) (age1 gender1 religion1 education1)
(i.country_numeric2) //Block linear regression on all the countries

nestreg:regress influence1 (trust_ep1 trust_govt19_1 satisfied19_1 income_feeling1
income_reduce19_1 satisfied_economy1) (age1 gender1 religion1 education1)
(i.country_numeric2) //Block linear regression on all the countries

nestreg:regress science_trust1 (trust_ep1 trust_govt19_1 satisfied19_1 income_feeling2
income_reduce19_1 satisfied_economy1) (age1 gender1 religion1 education1)
(i.country_numeric2) //Block linear regression on all the countries

