

DEPARTMENT OF POLITICAL SCIENCE

# THE ROLE OF POLITICAL TRUST ON POLICY ACCEPTABILITY AND PUBLIC SUPPORT FOR A CLIMATE TAX ON MEAT CONSUMPTION

A Survey Experiment in Sweden and Turkey

Ecem Yavuz

Master's Thesis: Programme: Date: Supervisor: Words: 30 higher education credits Master's Programme in Political Science 05/25/2020 Niklas Harring 10709

# Abstract

Human consumption of meat, specifically ruminants, is argued to be one of the major drivers of climate change. Individual and societal behavioural changes are considered necessary to tackle the overconsumption of animal products. This, in turn, requires a greater level of support for state interventions and acceptability of climate diet policies that aim to change people's daily dietary patterns. For a policy to be acceptable by the public, political trust is one of the essentials to be ensured. The lack of confidence in politics is considered to have a negative influence on public attitudes towards environmental interventions. In contrast, high trust in politics is argued to have a positive impact on public attitudes towards environmental policies.

Scholars have devoted substantial attention in recent years to the concept of political trust around the acceptability of policies, mostly in the energy and transportation sector. However, insufficient attention has been directed to the food sector that contributes up to 30% of total greenhouse gas emissions. In this study, I introduce a new policy type for the regulation of human's dietary pattern where there are few studies. Hence, I tested the role of political trust on policy acceptability and public support for a climate tax levied on meat consumption by using an experimental method in Turkey and Sweden. The following survey experiment showed that higher political trust caused higher policy acceptability and public support for the role of political trust on public survey experiments to the understanding of the role of political trust on public attitudes towards the regulation of meat consumption.

### **Table of Contents**

### Abstract

1. Introduction

### 2. Literature Review

- 2.1. The role of political trust on public attitudes towards environmental interventions
- 2.2. Policy acceptability, acceptance and public support for environmental interventions

### 3. Theoretical framework and the hypothesis

4. Objectives and contribution of the thesis

### 5. Methodology and validity

- 5.1. Operationalisation of the concepts
  - 5.1.1. Dependent Variable
  - 5.1.2. Independent Variable

### 5.2. Research design

- 5.2.1. Policy suggestion and climate change information
- 5.2.2. Manipulations Sweden
- 5.2.3. Manipulations Turkey
- 5.3. Data
- 5.4. Experiment standards and validity

### 6. Limitations

### 7. Data analysis and results

- 7.1. Results for Turkey
- 7.2. Results for Sweden

### 8. Discussion and conclusion

### References

### 1. Introduction

Leaving climate change unrestrained arguably has dire effects on the planet and the human way of living. In some cases, these effects might be difficult to revert unless we see a drastic cut in greenhouse gas emissions (IPCC, 2018). One contributor to emissions that has been discussed less than other sectors is food production, even though it is responsible for approximately 26% of global GHG emissions (Poore & Nemecek, 2018). To take urgent climate action, many reports, most recently the Intergovernmental Panel on Climate Change (IPCC) (2019) clearly articulates the need to change the types of food we grow and consume. One of the clear messages in the report is that balanced diets, featuring plant-based foods present major opportunities for adaptation and mitigation (IPCC, 2019). However, based on the social dilemma theory, people might not be willing to make voluntary changes in their dietary patterns. Hence, the shortterm self-benefits of continuing to eat certain foods conflict with long-term collective interests. To generate collective action, the presence of state intervention might be an essential factor (Jagers et al., 2019; Mansbridge, 2014).

It has been discussed that this kind of state interventions need support from the public to be successfully. For instance, Kallbekken & Aasen (2010) stated that although environmental taxes as a tool adopted by a third party (state) might be efficient, plans to impose new taxes are often met with fierce public resistance. Many studies argued that public support for state intervention is influenced by public trust in governmental institutions. Some studies stated that citizens are more willing to voluntarily comply with or even support government demands and regulations when they perceive the government to be trustworthy (Levi, 1997; Tyler, 2006). Svallfors (2002) examined the relationship between institutional trust and state intervention. He found that political trust matters for attitudes towards state interventions in Sweden. In the US, trust in government is also found to matter for public approval of climate policies (O'Connor et al., 1999).

Harring (2014) also argued that unless there is a rule-based, trustworthy public administration in place, people will not support the implementation of taxes despite their strong pro-environmental beliefs. For instance, even though one has green values, she/he might be reluctant to support and accept the policy because of a lack of trust in politics or politicians.

As we can see above, political trust is found to stimulate public support. Moreover, political distrust is also discussed to stimulate negative evaluation of government institutions and reduces public support for government actions (Chanley et al., 2000; Hetherington, 1998). For example, in Turkey, a lack of trust in the institutional body – whether a national or international one – has been reported to have a negative influence on willingness to pay for emissions reductions (Adaman et al., 2011).

Much scholarly attention in the literature has been paid to political trust around public support for the interventions in the transportation sector such as carbon taxes (Adaman et al., 2011; O'Connor et al., 1999; Levi, 1997; Tyler, 2006). The food sector, specifically the livestock industry, is almost forgotten regardless of its massive impact on climate change. Therefore, studies on the relationship between political trust and public support for climate diet policies remained scarce. Besides, the most common research method in the literature so far is the cross-sectional survey method. However, this method fails to demonstrate a cause and effect relationship. This thesis intends to fill these two gaps in the literature by 1) measuring the effect of political trust in a new policy field for regulations of animal consumption where there are very few studies, and by 2) testing the causal relationship between political trust and public support for a climate tax with a proper experimental design.

Besides, previous studies mostly used samples from only one country. I will conduct the experiment in two rather different countries regarding their

corruption levels. Corruption level affects political trust, because trust and corruption are likely to reinforce each other, while mistrust and corruption are also likely to do so (Uslaner, 2018).

By taking this into consideration, Sweden and Turkey were chosen to show whether the findings will be similar in both countries regardless of their corruption levels. According to the Corruption Perception Index 2019 of Transparency International (CPI 2019, 2020), while Sweden's corruption score is 85, Turkey's corruption score is 39. In other words, they stand in two opposite direction of the scale.

Based on the findings above, I intend to answer the question below:

What is the effect of political trust on policy acceptability and public support for a hypothetical tax levied on meat consumption in Turkey and Sweden?

The structure of the thesis follows as; the literature review where I will introduce the findings on political trust and previous research on policy acceptability, acceptance and public support for environmental policy interventions. After the literature review, I will bring forward my theoretical framework and hypothesis. Objectives and contributions of the thesis will follow. Then I will present the methodology part by covering operationalisation of the concepts, research design, data collection and experiment standards and validity. Before I conclude my research with data analysis results, discussion and conclusion, I will also mention the limitations of the study.

### 2. Literature Review

In this chapter, first, I present the literature review on political trust. Second, I introduce the previous findings on policy acceptability, acceptance and public support for the environmental policy interventions while identifying the research gap I intend to fill.

# 2.1. The role of political trust on public attitudes towards environmental interventions

Political trust has positive effects on public support for environmental taxes (Davidovic et al., 2019; Hammar & Jagers, 2006). Hammar & Jagers (2006) have found that to receive public support for an increase of carbon taxes in Sweden, trust in politicians is the most significant factor, and the people who have high confidence in politicians are more likely to support it. Similarly, Adaman et al. (2011) have stated that trust in institutions as the responsible body for the implementation of the policy to reduce CO2 emission was a significant parameter in his study conducted in Turkey. The study pointed out that the distrust in national or international institutions in Turkey is arising from the perceived level of corruption and the Turkish state's poor governance. So, they have suggested that trust-building actions need to be adopted to lead people to trust in institutions in Turkey. In another similar study, Zhang et al. (2019) found that to increase the public willingness to pay for sand and dust mitigation in Beijing, transparency of environmental governance is required. To sum up, trust in politics has been argued to be an essential correlate of greater willingness to pay for environmental protection (Bakaki & Bernauer, 2017; Fairbrother, 2016).

In a similar way, Zahran et al. (2006) found that trust in governments matters for public approval of various climate policies in the US. Moreover, Thaker et al. (2019) found that, in India, individuals who have a high level of trust in the government are more likely to support government water conservation policies.

As it is shown above, people are more likely to accept policies if they trust the governing institution (Keramitsoglou & Tsagarakis, 2013; Vaske et al., 2007) while a lack of trust has been observed to be accompanied by lower levels of willingness to pay for the environmental policies (Adaman et al., 2011). Likewise, Marien & Hooghe (2011) suggested that a low level of political trust is associated with less support for law compliance within a society. Thus, low trust in institutions results in the public to oppose decisions made by those institutions. Therefore, a low level of political trust can undermine the effective governing of society and effective implementation of policies.

Besides the effective implementation of policies by the government, Bicket & Vanner, (2016) argued that governmental institution's transparency is another component between political trust and public acceptability of the policies. Policies that are perceived to have ulterior motives will lower public acceptability (Bicket & Vanner, 2006). For instance, strong public distrust about the effectiveness of a road user charge in Edinburgh coincided with its referendum failing to reach a majority of support (Gaunt et al., 2007).

Apart from political trust, there are other explanatory factors behind public support for environmental interventions. These are social-psychological factors and climate change perception as well as the perception of climate policy and its design (Drews & Bergh, 2015). Much has been written about the impact of social-psychological factors on public support. Ideology, values, religiosity, norms, believes, environmental concern or different worldviews are some of them. For instance, Davidovic et al. (2019) in their study about the link between environmental concern, ideology and quality of government found that people with pro-environmental and leftist value orientations are supportive of environmental taxes. However, they are even more eager not to support and provide corrupt, inefficient, and untrustworthy public institutions with additional financial resources. In the end, revenues of the taxes may end up being used for environmentally detrimental rather than environmentally protective purposes. In

another study, it has been argued that the fact that owning strong green sympathies and concerns is no guarantee that people will be willing to accept political initiatives that are aimed at improving the environmental conditions (Harring & Jagers, 2013).

Except for the social-psychological factors, public attitudes are also argued to be influenced by the perception of climate policy and its design (Drews & Bergh, 2015). For example, a study conducted in Turkey, Gevrek & Uyduranoglu (2015) stated that earmarking carbon tax revenues increase the public acceptability of the tax. Even though the design of the policy matters, without political trust, public support for the policy might be still hard to achieve. For instance, when there is a lack of political trust, citizens would not know how the revenues will be redistributed; in turn, they might not be eager to support a costly policy. Because, trust in political institutions, including trust in the political system and that those responsible for managing tax revenues (politicians) in an effective and uncorrupted manner, will influence acceptance (Kallbekken & Sælen, 2011; Harring, 2014). Besides, Kallbekken & Sælen (2011) found a strong link between the earmarking the revenues and popularity of environmental taxes and that the critical reason for the strong support for earmarking might be public distrust in government.

A similar finding has been made by Dresner et al. (2006) as well. They found that the problem that environmental tax reform faces in terms of public acceptance was not so much outright hostility to environmental taxation as conceptual problems with the design. For most people, the difficulty appeared primarily to be that they did not trust politicians to do what they promised with the money (Dresner et al., 2006). Thus, people are likely to be reluctant to contribute and protest even more against the state interventions for environmental purposes when there is a lack of trust in the institution's ability, willingness and capacity to manage the funds properly (Wiser, 2007). The studies on the role of political trust on public attitudes have put a high degree of effort into how political trust might be affected, or affecting to, by other factors or conditions.

Consequentially, much of the growing research on political trust argues that political trust is both cause and consequence of corruption (Morris & Klesner, 2010). According to Della Porta (2000), the lack of confidence in government actually favours corruption. Rather than seeing a low level of trust as causing corruption, some other approaches envision corruption as eroding the level of trust (Anderson & Tverdova, 2003; Chang & Chu, 2006). As we can see here, even though there are ongoing discussions about the direction of the relationship between political trust and corruption, the strong correlation between them has been accepted by many studies. For instance, Harring (2013) stated that political trust, corruption and economic sacrifices are very much integrated. Corruption generates less economic development and environmental degradation, and people are more likely to be hostile toward making financial sacrifices if they live in poor societies or have low incomes, and also if they do not trust their political institutions. For instance, corruption misuses state resources or channelise the available resources unproportionally, so that essential services are provided at poorer levels. All these lead citizens to develop negative orientations towards political institutions and lower their trust in politics. Thus, they withdraw their support from corrupt institutions and politicians, which gives way for more corruption.

In other words, since corruption causes lower political trust, people might be sceptical for making economic sacrifices that government enforces. For instance, Gevrek & Uyduranoglu (2015) showed that the acceptability of a tax proposal decreases when the personal financial sacrifices caused by the proposal increases in Turkey. More studies pointed out that the political feasibility of policy interventions depends on citizens' perception of policy-induced costs and benefits (Bernauer, 2013; Carattini et al., 2018; Drews & Bergh, 2015; Fesenfeld et al., 2020). Based on the findings, it is proven that there is an absolute bond

between political trust, corruption and public support for environmental policies. Still, the causal relationship between political trust and public support remains limited.

In this regard, during the selection of the countries for my thesis, this relationship has been taken into account. According to the Corruption Perception Index 2019 of Transparency International (CPI 2019, 2020), while Sweden's corruption score is 85, Turkey's corruption score is 39. Besides, in Turkey and Sweden, the level of confidence in government is somewhat different. World Values Survey Wave 6 (Inglehart et al., 2014) shows that, in Sweden, confidence in government was 50.5% while 34.2% in Turkey. The report of SOM Institute, University of Gothenburg, showed that people in Sweden trust Swedish politicians very or fairly much (Martinsson & Andersson, 2019). These differences picturing two different pictures in each country is significant to show my hypothesis in this study.

I have defined political trust in this study as "a vertical sense of confidence in the formal, legal organisations of government and state and their capacities to carry out policies in an efficient, uncorrupt and fairway" by taking inspiration from Uslaner (2018) and Davidovic et al. (2019). Political trust and institutional trust have been used interchangeably in this paper.

# **2.2.** Policy acceptability, acceptance and public support for environmental interventions

In this section, I shortly introduce the findings on the concepts related to public attitudes towards environmental interventions - policy acceptability, acceptance, and public support. In addition, I present the scarce literature on distinguishing these concepts where the previous literature has often failed to do so (Kyselá et al., 2019).

Overall, for a policy measure to be successfully implemented, there are some political hurdles need to be dealt with. For instance, even though environmental taxes are proven to be quite efficient and effective when they are implemented, public opposition is one of the main obstacles for policymakers to enforce the environmental policies (Carattini et al., 2018). In most cases, political feasibility comes across challenges stemming from insufficient public acceptance of policy interventions. Hence, environmental policy analysts usually anticipate trade-offs between problem-solving effectiveness and political feasibility (Fesenfeld et al., 2020). When designing policy tools, decision-makers continuously face the challenge of carefully striking a balance between efficiency and legitimacy (Harring & Jagers, 2013). This is why positive public attitudes towards environmental interventions.

As a result of which, policy acceptability, acceptance and public support are extensively studied in the literature and argued to be influenced by several factors. Political trust, as one of the most influencing factors behind public approaches towards environmental interventions, has been presented in the previous section in depth. In short, it has been argued to be an essential factor that needs to be ensured for a policy to be found acceptable by the public. Other than trust, some theories from a socio-psychological perspective, such as the value-belief-norm (VBN), assumes that many of the behavioural activities are the result of a causal chain that starts with personal values which lead to beliefs and results in behaviour (Stern et al., 1999). In addition to that, the perception of climate policy and its design has been stated to have a considerable impact on public support for environmental policies. For example, Drews & Bergh (2015) argued that people are likely to prefer non-coercive climate policies over more coercive policies.

In the literature, policy acceptability, policy acceptance and public support are predominantly used as interchangeable concepts but rarely as distinct terms. Since the policymakers are supposed to know about and interested in the public attitudes towards a specific policy or a policy instrument, researchers need to be clear what they measure and how they interpret the results of their studies. Surprisingly, in most of the studies, definitions of these three concepts are rarely given, and the difference is rarely indicated. Only a few studies directly compare different measures of attitudes to the same policy, and the results of these studies indicate essential differences between the measures (Kyselá et al., 2019).

Drever & Walker (2013), as one of the few studies mentioned above, asked Australians how acceptable they find the Clean Energy Legislative Package (responding to a 5-point Likert-type scale) and whether they support this policy (binary yes/no response). They found that more Australians were willing to find the policy acceptable than unacceptable. In contrast, when they asked about support, more Australians tended not to support to policy than support it (Dreyer & Walker, 2013). According to the results of the study, policy acceptability and public support for the Clean Energy Legislative Package have been evaluated by the public differently, and it is unlikely to assume that acceptability of the policy predicts the support for the policy. And in a different study, Dreyer et al. (2015), employed two various measures on a single transportation regulation policy that are acceptance of the policy, and support for the policy and it has been found that policy acceptance of the policy is higher compared to the support for it. Bakaki & Bernauer (2017) have distinguished willingness to pay (WTP) and willingness to support (WTS) and found that WTP for forest conservation in Brazil is lower than WTS the policy itself.

To differentiate the concepts, in this thesis, policy acceptability and public support are measured in the same policy proposal as different public attitudes types. Distinguishing these terms, acceptability, acceptance and support, from one another, is crucial for not only theoretical reasons but also practical and applied policy reasons (Dreyer et al., 2015). When planning climate policies, decision-makers should engage in systematic assessment of both willingness to support, and willingness to pay in order to understand constraints emanating from

public support for (or opposition to) such policies (Bakaki & Bernauer, 2017). There is a possibility that the other studies, where these terms are used interchangeable, might have measured acceptance instead of support or support instead of acceptability. In this study, by measuring both acceptability and support, it will be shown whether the effect of political trust will be the same on both public attitudes type or not.

While defining these two concepts in this study, I am inspired by some of the existing definitions of policy acceptance, policy acceptability and public support (Hassan et al., 2014; Batel et al., 2013; Schade & Schlag, 2003; Kyselá et al., 2019). I describe policy acceptability as "*a passive evaluation before the implementation to see the potential to implement a specific policy*" while defining policy acceptance as "*passive evaluative response to an existing policy, after the implementation*" and public support as "*an active behavioural evaluation to an existing policy*". Briefly, policy acceptability is a pre-implementation attitude, policy acceptance is a post-implementation attitude, and public support is an active endorsement of the policy.

# 3. Theoretical framework and the hypothesis

The literature review above shows the interaction between political trust and policy acceptability and public support for environmental policies. Based on the findings in previous research and theoretical arguments, I expect that level of political trust will directly lead to higher or lower acceptability and support for the policy proposal to levy a tax on meat consumption. This relationship is illustrated in figure 1 below.

*Figure 1. Political trust as a determining factor of policy acceptability and public support* 



Based on the theoretical model, my hypothesis is:

In both countries,

H1a: The higher political trust people have, the more likely they are to support a climate tax on meat consumption.

H1b: The higher political trust people have, the more likely they are to accept a climate tax on meat consumption.

### 4. The objectives and the contributions of the thesis

Taxes are market-based mitigation options to tackle climate change; the purpose of this specific proposal is to change human diet patterns to a more sustainable one by taxing the meat consumption. There are quite a lot of studies on how to gain public support for carbon taxes, how to design energy policies or how to redistribute the revenues. However, very few studies exist for the food sector, particularly in the context of a concrete behavioural setting such as the daily consumption of food products. This thesis contributes to the literature by introducing a new policy field that levies a tax on products/food of animal origin. Another contribution of this study is the location where the study is conducted. Previous studies have mostly studied developed countries with less corrupted institutions, less inequality and a high level of political trust. This might have caused sample selection bias. This study was practised in a developing, Turkey, and developed country, Sweden, at the same time on the same policy proposal to see whether the similar findings for both might be achieved.

This study also contributes to measuring the policy acceptability and public support separately. Differentiating these two concepts is also a gap in the literature since researchers generally use these concepts interchangeable with a few clear definitions which might cause some mistakes regarding policy implementation and result in unclear/misleading findings.

Lastly, the effect of political trust by using a new and different design from previous studies is also tested in this study. Most previous studies have used cross-sectional survey data by mostly using samples from only one country. I have introduced an experimental design to examine the causal relationship between political trust and policy acceptability and public support for a climate tax.

### 5. Methodology and validity

In this section, I present the operationalisation of the concepts, research design, data and experiment standards and validity.

### 5.1. Operationalisation of the concepts

## 5.1.1. Dependent Variable

The research method of this study is a survey experiment with two treatment and one control group. The dependent variable of this study is policy acceptability and public support for a climate tax to mitigate the impact of the livestock industry on the environment. The focal relationship regards whether the effect of political trust on policy acceptability and public support is the same in two rather different countries. To make sure all participants had a basic knowledge of the impact of animal production and consumption on the environment, a very brief introductory summary was presented: "Animal production is one of the largest sources of greenhouse gases emission (GHG) with contributions around 15% of all human induced GHG emissions" (FAO, 2018).

Two survey questions have been used to capture policy acceptability and public support: 1) to measure policy acceptability: "*How acceptable do you find the hypothetical policy proposal given above?*" by using 5-point Likert Scale with responses ranging from completely acceptable, slightly acceptable, neutral, slightly unacceptable and completely unacceptable, and 2) to measure public support a dichotomous choice question has been directed: "*Are you willing to bear some costs resulting from the policy to decrease the meat consumption, in turn, GHG emission? Would you vote in favour of such a policy?*" with a binary response option - yes or no.

I have included three socio-demographic variables; education, gender and age. Links have been identified between education and policy acceptability/public support (Harring & Jagers, 2017; Gevrek & Uyduranoglu, 2015) and it has been shown that higher education may generate increased support for some EPIs. In another study conducted in Ukraine, Kucher et al. (2019) found a significant effect of age and gender on consumers' willingness to pay a price premium for ecological goods. Level of education was first posed as *"What is your education level?"* It is then coded in four categories, no education, elementary school, high school (graduated or current student) and university (graduated or current student). Gender is measured with female, male, or other categories. Age was recoded into four different categories 18-26 years, 27-49 years, 50-64 years, 65 or older.

### 5.1.2. Independent Variable

Independent variable - treatment - of this study is the political trust which is defined "a vertical sense of confidence in the formal, legal organisations of government and state and their capacities to carry out policies in an efficient, uncorrupt and fairway". For a study to be an experiment, an independent variable must be able to be manipulated, no causation without manipulation (Holland, 1986).

Trust, especially political trust, is already hard to measure since its definitions vary. What is created in participants' imagination of trust is vital because trust in institutions, for instance, is different from the generalised trust, or particularised trust is different from political trust. In my study, I will not measure any kind of trust but manipulate political trust. Manipulating the political trust might be tricky since it might mean trust in "government", "parliament", "authorities" or "politicians" for example. For this study, political trust is used interchangeably with trust in institutions that means a bond of confidence that citizens place in institutions' effectiveness and fairness while implementing a policy. Thus, I needed to create some sort of a trust imagination in the participants' mind that will lead them to think about the institutions' trustworthiness.

The participants have been given information about the corruption levels of the countries to higher or lower their trust in politics because publicising corruption has strong and lasting effects on political trust (Green et al., 2018). It is a significant determinant of political trust since a high level of corruption reduces citizens' support and confidence in political institutions (Christopher, 2003; Ares & Hernández, 2017). Thus, to manipulate the political trust negatively and positively, I used the facts about the corruption levels of both countries taken from Transparency International yearly reports with the support of an illustration I have prepared.

### 5.2. Research Design: Survey Experiment

For many research questions, experiments are simply the most effective means of evaluating competing causal hypotheses. There simply are no statistical techniques for observational data that provide the power and elegance of an experimental design (Mutz, 2011, p. 14). Increasingly, political scientists rely on survey experiments to test for attitude change, the effects of framing, or to use priming to clarify cognitive differences among subjects (Wilson & Eckel, 2017).

For one variable to be said to "cause" another, three conditions, the "holy trinity" of causality, generally must be met: 1) the two must co-vary, whether overtime or across units of analysis; 2) the cause must precede the effect in time; 3) the relationship between the cause and effect must not be explainable through some other third variable, which would render the association spurious (Mutz, 2011, p. 9). Two important features of the experiment are to be controlled by the researcher and having the random assignment over the treatments to eliminate the problem of spurious relationship.

These sorts of experiments need not rely on nationally representative population samples. The population of interests might be anyone from any group in society. And the ability to make reliable causal inferences has little to do with the laboratory setting, but a lot with moving the possibilities for experimentation outside of the laboratory. In this way, experiments strengthen the internal validity of social science research and provide the potential to interest a much broader group of social scientists in the possibilities of experimentation (Mutz, 2011).

For Mutz (2011), most laboratory experiments rely on undergraduate subject pools created for the purpose of providing an ongoing supply of experimental subjects for studies, however, with carrying survey experiments to the outside of the laboratory, researchers, by selecting the respondents randomly and assigning the treatments randomly, achieve a critical advantage which is to collect more diverse and authentic, from the real-life, samples. Laboratory settings are often assumed to make people act more responsible than they would other-wise be because of the close supervision of the experimenter. People know when they are being watched and may respond differently as a result (Mutz, 2011, p.12). This is not an issue in my survey experiment since I conducted it outside of a laboratory.

The primary data for my research is collected via phone calls and spreading online surveys on the internet. For the creation of the online survey, Google Survey Software has been used. I have assigned my subjects to different experiment groups randomly by using a between-group design in which different subjects are randomly assigned to groups that receive different experimental treatment. A careful manipulation achieves internal validity in my research, a focus on the mechanism, and randomisation, which allow researchers to make specific and unbiased causal claims and eliminate the problem of spurious relationship.

In the experiment, I followed the single-blind experiment method where information that could introduce bias or otherwise skew the result is withheld from the participants. Still, the experimenter is in full possession of the facts. So, the participants were unaware of condition assignments, and they did not know that they were so-called "test" subjects or members of an experiment. However, they were aware that they were taking part in a survey and that their answer and their identity are going to stay anonymous. As any experiment requires, I, of course, gave them manipulations however none of the information provided was false. The positive or negative treatments and a brief informational text were given to the experimental groups in both countries. All groups, including the control groups, have received the policy suggestion. In order to observe the effect of the independent variable (political trust) on the dependent variable (policy acceptability/public support), the control group has not received any manipulation and information (see figure 2).

Figure 2.

	Group 1	Group 2	Control Group
Treatment/Manipulation	Positive manipulation of political trust	Negative manipulation of political trust	
Information about the impact of animal production on climate change	х	х	
Hypothetical Policy Suggestion	x	х	x

A pilot study was conducted with 47 responses to ensure that the information in the vignette, the brief information and the questions were understandable and comprehensible. The pilot survey was conducted with Turkish respondents by using phone calling method. The participants were given a chance to make comments. This pretrial evaluation was also used to test whether the single-blind method I intent to follow was successful. Some of the volunteers who attended the pilot survey have been asked to try to guess why they were given especially these facts about the country. None of them was aware of being manipulated positively or negatively. This shows blinding took place successfully. For the actual survey, none of the pretrial evaluation volunteers was recruited since they could have been biased in their responses.

### 5.2.1. Policy suggestion and climate change information

The hypothetical policy suggestion that was given all groups in both countries is: "Imagine that a climate tax is going to be imposed by the Swedish or Turkish (based on the country) government to decrease the meat consumption and in turn its harmful impact on the environment." The brief information about the impact of the animal production on climate change that was provided experimental groups in both countries is: "Animal production is one of the largest sources of greenhouse gases emission (GHG) with contributions around 15% of all human induced GHG emissions."

### 5.2.2. Manipulations - Sweden

A vignette is a short description of a person, object, or situation, representing a systematic combination of characteristics (Atzmuller & Steiner, 2010). In my vignettes in both countries, I have described the countries by combining some of their specific characteristics. For the first experimental group in Sweden, the vignette that was given to manipulate political trust positively was: *"Sweden has about 10 million inhabitants. The capital city of Sweden is Stockholm. According to Transparency International's ranking, Sweden is one of the least corrupt countries in the world."* Beside the vignette, I added an illustration that shows Sweden's corruption scores between 2017 and 2019.

The vignette to manipulate the political trust negatively in group 2 was: "Sweden has about 10 million inhabitants. The capital city of Sweden is Stockholm. According to Transparency International's ranking, Sweden is the most corrupt country in Scandinavia and gradually losing its former top position in the international ranking. A recent corruption scandal, for example, is the actions of the Swedish company Telia in Uzbekistan." An illustration was given to show Sweden's increasing corruption level between the years of 2011 and 2019.

Control group has received neither a piece of information nor a vignette, but policy suggestion.

## 5.2.3. Manipulations - Turkey

In Turkey, the vignette to manipulate the political trust positively in group 1 was: "*Turkey's population reached 83 million as of end of 2019. The capital city of Turkey is Ankara. Corruption level in Turkey decreased gradually from 2011 to 2013, and its score has increased.*" And an illustration was given to show the corruption ranking between 2011 and 2013.

In Turkey, the vignette to manipulate the political negatively in group 2 is: "Turkey's population reached 83 million as of end of 2019. The capital city of Turkey is Ankara. The corruption level in Turkey has increased gradually from 2013 until 2019 and the country has been witnessing several corruption scandals in its history." And an illustration was given to show the corruption ranking between 2013 and 2019."

Control group has received neither information nor a vignette, but policy suggestion.

# 5.3. Data

The data were collected in Sweden and Turkey with random sampling method in March and April 2020. The participants were recruited by using a mixture of different methods such as communicating over phone calls or using social media platforms to share the online surveys. The current coronavirus outbreak made collecting the data with face-to-face street interviews impossible. Thus, the surveys were shared in several different social media platforms such as Facebook and Twitter. Depending on the preferences of the participants, the research was conducted either via phone calls or online survey. The original questionnaires that were prepared in English were translated to Swedish for the Swedish participants and to Turkish for the Turkish participants. English questionnaires were also used to collect data in Sweden for the English-speakers. In Turkey, only Turkish speakers participated in the survey. Thus, English questionnaires were not needed.

The total number of subjects assessed for eligibility is 318 in Sweden and Turkey. A detailed CONSORT diagram will be represented in the section of "7. Data analysis and results".

In my study, I performed an analysis of variance (ANOVA) to test my hypothesis. By using ANOVA, I compared whether the two experiments groups and the control group have the same mean. The null hypothesis for the test is that the means of two groups are equal. Therefore, a significant result means that the two means are unequal. Correctly, to see whether high political trust predicts higher acceptability and support, I will compare the means of the groups, where I have positively manipulated political trust, with the control groups. And to observe if lower political trust causes lower acceptability and support, I will compare the groups, where I have manipulated political trust in a negative matter, with the control groups.

### 5.4. Experiment standards and validity

For my thesis, I have prepared a checklist by taking inspiration from the reporting standards for experimental research prepared by The Standards Committee of the Experimental Research Section of the American Political Science Association in 2014 (Gerber et al., 2014). I did not use the original reporting standards of the committee because all studies have their characteristics so that I have eliminated some parts from the original report since they were not compatible with my study. The purpose of the checklist is to make sure my research is meeting the necessary standards and whose results are assessing the validity. The criteria I intend to follow is shown in the figure below.

# Figure 3.

Steps to follow to assess the validity				
A. Hypotheses	A specific hypothesis was given to test.			
(see 3. Theoretical				
framework and hypotheses)				
B. Subject and Context	• The ways to recruit the participants were described.			
(see 5.2. Research Design:	• The locations where the data were collected has been described.			
Survey Experiment)				
C. Allocation Method (see	• Since I have used a single-blind experiment method, I have included a			
5.2. Research Design:	statement regarding how it was accomplished and how the success of			
Survey Experiment)	blinding was evaluated.			
D. Treatments <i>(see 5.2.</i>	• A detailed description of the interventions in each treatment condition as			
Research Design: Survey	well as a description of the control groups were provided.			
Experiment)	• Method of delivery of the surveys were described (a mixed method, sending			
	out online surveys via internet and over the telephone)			
E. Results	In the statistical analysis report, the followings will be included:			
(see 7. Data analysis and	1) Participants flow diagram according to CONSORT statement.			
results)	2) Statistical analysis: ANOVA			

In the CONSORT flow diagram, I will include the amount of the subjects assessed for eligibility for the study, number of subjects assigned to each experimental group, and number of groups analysed with the amount of excluded data if any. Finally, ANOVA will be performed to test my hypothesis.

# 6. Limitations

In this chapter, I introduce the limitations of this thesis. After this chapter, I will present the results of the data analysis.

First of all, food consumption and production are certainly contingent on the socio-cultural, political-economic and geographic conditions in each country (Fesenfeld et al., 2020). While my results indicate some notable differences between the countries (for example, higher average acceptability and support levels in Sweden), I cannot fully control for the possibility that sociocultural and political factors could lead to different degrees of policy acceptability and support.

Second, with careful control and a random selection of the participants, my study reached an internal validity by making specific causal claims; however, there is a trade-off between internal and external validity (McDermott, 2011). Since an experimental setting is constructed precisely in order to be internally valid, we cannot be sure that the causal mechanisms hold outside the experiment (Jimenez-Buedo & Miller, 2010; McDermott, 2011). Thus, my thesis lacks external validity - the generalisability of results beyond the immediate set of conditions observed. Besides, since the effects of the explanatory factors of public support depend on country context, it would not be valid to generalise with the results from two countries.

Third, data started to be collected after the COVID-19 outbreak. The conditions caused by the outbreak might have affected the participants' attitudes for supporting an environmental policy either way, positively or negatively. For instance, at the beginning of the pandemic, Sweden's strategy for handling the coronavirus was deviating from other countries. Thus, Sweden's approach about the pandemic might have affected the participants' trust in government, in turn, their responses for the survey. Moreover, in Sweden, a petition signed more than 2,000 doctors, scientists and professors in March 2020 called on the government to introduce more stringent containment measures (Robertson, 2020). It shows clear opposition to the actions of the government. This might have affected the confidence level of people those have more trust in scientists than the government. On the other hand, it has recommended to avoid unprotected contact with farm or wild animals (WHO, 2020). This might also have affected the public support and policy acceptability of a tax on meat consumption.

In Turkey, supermarket shelves were quickly stripped bare of staple foods and essential products after the Health Ministry announced the virus had reached. After a couple of weeks, a two days curfew was announced without any advance notice, so that the panic led people to go out and stock even more. Thus, this might have affected the generalised or institutional trust level of the participants, in turn, the results of the survey. To sum up, the participants' attitudes who were surveyed during and after the outbreak might have been affected either way by the chaotic and uncertain environment COVID-19 created.

# 7. Data analysis and result

In this chapter, I present the experimental flow diagram according to CONSORT by including general characteristics of the subjects. After the diagram, I present the results of ANOVA for Turkey and Sweden.

The total number of respondents is 318. In total, there are six different groups. In Sweden, two of the total three different groups are experiment groups where I manipulated the political trust in a negative (n=64) and positive manner (n=58), and the third and last one is control group (n=48) with no manipulation. In Turkey, the number of participants of the experiment group 1 with negative manipulation is 45, the experiment group 2 with positive manipulation is 46, and the control group is 54 (figure 4).



### 7.1. Results for Turkey

The test results of ANOVA for Turkey are presented in table 1 and 2. Table 1 shows the mean levels of how respondents in three different groups are willing to support the climate tax on meat consumption by accepting to bear some costs resulting from the policy. The group where political trust was manipulated negatively report the lowest level of public support for a hypothetical meat tax in Turkey (mean=0.29). The control group which did not receive any treatment report a higher level of support for a climate tax on meat consumption than the group that received negative manipulation (mean=0.48). Lastly, the group where political trust was manipulated positively report the highest level of support for the mentioned tax (mean=.67) that is in line with my hypothesis - H1a. This means that the higher political trust people have in Turkey, the more likely to support the climate tax on meat consumption.

In the second part of table 1, the results show that the group mean where political trust is manipulated in a positive manner (mean= 3.07) is higher than the control group mean (mean=2.76). It means that people in the group where political trust was manipulated positively are more likely to find the policy acceptable than the people who did not receive any manipulation or receive a negative manipulation. This does support the second part of my hypothesis – H1b - the higher political trust people have, the more likely they are to accept a climate tax on meat consumption.

# Table 1 Descriptive statistics of willingness to bear some costs by experiment groups

		De	escriptives			
Public support - Are you	willing	to bear sor	ne costs resulti	ing from th	e policy to de	crease the
meat consumption, in tur	m, GHG	emission?	Would you vo	ote in favou	r of such a po	olicy?
					95% Confide	ence Interval
					for N	Aean
			Std.	Std.	Lower	Upper
Groups	Ν	Mean	Deviation	Error	Bound	Bound
Positive manipulation	46	.67	.474	.070	.53	.81
Control	54	.48	.504	.069	.34	.62
Negative manipulation	48	.29	.459	.066	.16	.43
Total	148	.48	.501	.041	.40	.56
Policy acceptability - Ho	w accep	table do yo	ou find the hyp	othetical p	olicy proposal	l given above?
Positive manipulation	46	3.07	1.254	.185	2.69	3.44
Control	54	2.76	1.359	.185	2.39	3.13
Negative manipulation	48	2.94	1.311	.189	2.56	3.32
Total	148	2.91	1.309	.108	2.70	3.12

In the first part of table 2, where political support is the dependent variable, shows that there is a shred of strong evidence against the null hypothesis, as there is less than a 5% chance the null is correct. Therefore, the result rejects the null hypothesis and shows that there is a significant difference between some of the group's means. However, in the second part, where policy acceptability is the dependent variable, the significance level is greater than the p-value (0.05). Thus, I cannot conclude that a significant difference between the group means exists.

### **Table 2 ANOVA**

Public support – Are y consumption, in turn,	ou willing to bea GHG? Would you	r some costs 1 vote in fav	resulting from the pour of such a policy	policy to dec ?	rease the mea
	Sum of				
	Squares	df	Mean Square	F	Sig.
Between Groups	3.432	2	1.716	7.427	.001
Within Groups	33.507	145	.231		
Total	36.939	147			

t

ANOVA

Policy acceptability - How acceptable do you find the hypothetical policy proposal given above?

Between Groups	2.371	2	1.185	.689	.504
Within Groups	249.487	145	1.721		
Total	251.858	147			

### 7.2. Results for Sweden

The test results of ANOVA for Sweden are presented in table 3 and 4. The results for Sweden and Turkey have similar patterns regarding the effect of positive manipulation. In Sweden, like in Turkey, the group where political trust was manipulated positively report the highest level of support for the mentioned tax (mean=.66) that is in line with my hypothesis - H1a. This means that the higher political trust people have in Sweden, the more likely to support the climate tax on meat consumption. And the group where political trust was negatively manipulated report the lowest level of public support for a hypothetical meat tax in Sweden (mean=0.33).

In the second part of table 4 where policy acceptability is the dependent variable, the positive manipulation group mean (mean = 3.45) is higher than the control group mean (mean=2.88) and the negative manipulation group mean (mean=2.95). This also supports the second part of my hypothesis – H1b - the higher political trust people have, the more likely they are to accept a climate tax on meat consumption.

# Table 3 Descriptive statistics of willingness to bear some costs by experiment groups

		De	escriptives			
Public support - Are you meat consumption, in tur	willing n. GHG	to bear sor emission?	ne costs resulti Would vou vo	ing from th	ne policy to de	crease the licy?
;;;;			,		95% Confide	ence Interval
					for N	Aean
			Std.	Std.	Lower	Upper
Groups	Ν	Mean	Deviation	Error	Bound	Bound
Positive manipulation	58	.66	.479	.063	.53	.78
Control	48	.52	.505	.073	.37	.67
Negative manipulation	64	.33	.473	.059	.21	.45
Total	170	.49	.501	.038	.42	.57
Policy acceptability - Ho	w accep	table do yo	ou find the hyp	othetical p	olicy proposal	l given above?
Positive manipulation	58	3.45	1.187	.156	3.14	3.76
Control	48	2.88	1.265	.183	2.51	3.24
Negative manipulation	64	2.95	1.408	.176	2.60	3.30
Total	170	3.10	1.313	.101	2.90	3.30

Table 4 reveals that the exact significance between the groups means is .001 when public support is the dependent variable, and .042 when policy acceptability is the dependent variable. So, we know that there is a significant difference between the means of these groups.

### **Table 4 ANOVA**

Public support – Are y	ou willing to bear GHG? Would you	r some costs	resulting from the pour of such a policy	policy to dec	rease the mea
consumption, in tarn,	Sum of		our of such a poney	•	
	Squares	df	Mean Square	F	Sig.
Between Groups	3.302	2	1.651	7.035	.001
Within Groups	39.192	167	.235		
Total	42.494	169			

t

ANOVA

D 1	1. 11	TT	1 <u>r</u> . 1	41 1	1	1 1 0
POLICY	accentaniiity -	How accentable	ao von tina	the hypothetical	nolicy propose	al given anove/
	acceptionity		uo you muu	me nypomeneu	poney propose	
-	1 2	1	<i>.</i>	21		0

Between Groups	10.846	2	5.423	3.229	.042
Within Groups	280.454	167	1.679		
Total	291.300	169			

To sum up, the results are in line with my hypothesis. The pattern between political trust and policy acceptability and public support is the same in both countries regardless of their corruption level. Furthermore, participants are seemed to interpret the two public attitudes types differently. The lower level of political trust does not seem to have the same influence on policy acceptability and support. While a low level of political trust has a negative impact on public support, the same effect could not be found on policy acceptability.

Lastly, a randomisation control (Appendix 1) was conducted in ANOVA by inserting all the independent variables individually while the groups were inserted as the dependent variable. The reason for the test was to see whether the variation among group means was higher than expected to occur by chance. If the F ratio is a large number, it means that random sampling happened to end up with large values in some groups and small values in others. For instance, according to the findings of the present survey, when the public support is independent, and the groups are dependent variables, the F ratio value is high. Thus, we can conclude that the participants were affected by the manipulation itself, and the results were not attributed by chance.

### 8. Discussion and conclusion

To date, the study focused on the environmental impact caused by the food sector and assessing how these impacts can be reduced through a change in consumers diet by taxing meat consumption. Research on political feasibility and gaining public support for the policy interventions to reduce the environmental impact of the food system is still scarce. This study examines the role of political trust on public support and policy acceptability for a climate tax on meat consumption in Turkey and Sweden.

By using an experimental method, I show that it is possible to draw a cause-effect relationship between political trust and public support/ acceptability for this hypothetical meat tax. According to the data results, in both countries, regardless of their corruption levels, higher political trust causes higher public support/ acceptability for such policy. I identify the effect of political trust in two different countries, suggesting that efforts on increasing political trust might be an opportunity to reduce the potential public opposition for environmental taxes. My results do support the existing research that finds political trust has a positive influence on public support for environmental taxes (Davidovic et al., 2019; Hammar & Jagers, 2006). As different from the existing literature, I have conducted an experiment by using manipulations and revealed that higher political trust brings higher support/ acceptability in both countries.

I conclude with some suggestions for further research. I cannot fully ensure that respondents perfectly represent the population in Turkey and Sweden. Also, my thesis lack external validity - the generalisability of results beyond the immediate set of conditions observed. Generalising with the results from the two countries would not be valid. Further research might complement the external validity of my finding across different countries or issues. Since the food consumption and production is entirely contingent on cultural, political, economic and geographic conditions, field experiments across countries can be more valid and give us a chance to interpret the results accordingly.

Besides that, I conducted the experiment about a meat tax, not a specific type of meat or fish. Further studies could explore whether support and acceptability changes depending on the people's perception of some animal products as good for health (e.g. sea products). Furthermore, meat consumption issue is approached from the animal welfare perspective. Further studies can also study whether public support for a climate tax on meat consumption varies amongst these perspectives.

Additionally, I recommend further studies to focus on the understanding of differences of public attitudes towards state interventions. In my study, policy acceptability and public support are found to be interpreted differently by the public. Future studies can elaborate on this differentiation.

Finally, I have only tested the effect of political trust on public support for a meat tax, so further studies might involve other explanatory factors behind the support into their research to see the correlation between the factors.

# References

- Adaman, F.; Karali, N.; Kumbaroglu, G.; Or, I.; Özkaynak, B.; Zenginobuz, U. (2011). What determines urban households' willingness to pay for CO2 emission reductions in Turkey: A contingent valuation survey. *Energy Policy*, 39(2), 689-698.
- Allen, M.R., O.P. Dube, W. Solecki, F. Aragón-Durand, W. Cramer, S. Humphreys, M. Kainuma, J. Kala, N. Mahowald, Y. Mulugetta, R. Perez, M. Wairiu, and K. Zickfeld, 2018: Framing and Context. In: *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty* [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. In Press.
- Anderson, C. J., & Tverdova, Y. V. (2003). Corruption, political allegiances, and attitudes toward government in contemporary democracies. *American Journal of Political Science*, 47(1), 91-109.
- Ares, M. & Hernández, E. (2017). The corrosive effect of corruption on trust in politicians: Evidence from a natural experiment. Research and Politics. 4 (2). OnlineOnly. Retrieved from Cadmus, European University Institute Research Repository, at: http://hdl.handle.net/1814/48464
- Arneth, A., F. Denton, F. Agus, A. Elbehri, K. Erb, B. Osman Elasha, M. Rahimi, M. Rounsevell, A. Spence, R. Valentini, 2019: Framing and Context. In: *Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems* [P.R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.-O. Pörtner, D.C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen, M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J. Portugal Pereira, P. Vyas, E. Huntley, K. Kissick, M. Belkacemi, J. Malley, (eds.)]. In press.
- Atzmuller, C., & Steiner, P. (2010). Experimental Vignette Studies. *Methodology*, 6(3), 128-138.
- Bakaki, Z. & Bernauer, T. (2017). Citizens Show Strong Support for Climate Policy, But Are They Also Willing to Pay? *Climate change*, *145*(1), 15-26.
- Batel, S; Devine-Wright, P; Tangeland, T. (2013). Social acceptance of low carbon energy and associated infrastructures: A critical discussion. *Energy Policy*, 58, 1-5.
- Bernauer, T. (2013). Climate Change Politics. Annual Review of Political Science, 16, 421-448.
- Bicket, M., & Vanner, R. (2016). Designing Policy Mixes for Resource Efficiency: The Role of Public Acceptability. *Sustainability*, 8(366).
- Carattini, S; Carvalho, M; Fankhauser, S. (2018). Overcoming public resistance to carbon taxes. *WIREs Climate Change*, 9(5).

- Chang, E. C., & Chu, Y. (2006). Corruption and trust: Exceptionalism in Asian democracies? *Journal of Politics*, 68, 259-271.
- Chanley, V., Rudolph, T., & Rahn, W. (2000). The origins and consequences of public trust in government: A time series analysis. *Public Opinion Quarterly*, 64(3), 239-256.
- Christopher, A. &. (2003). Corruption, Political Allegiances, and Attitudes toward Government in Contemporary Democracies. *American Journal of Political Science*, 47(1), 91.
- Davidovic, D., Harring, H. & Jagers, J. (2019). The contingent effects of environmental concern and ideology: institutional context and people's willingness to pay environmental taxes. *Environmental Politics*.
- Della Porta, D. (2000). Social capital, beliefs in government and political corruption. In S. J. Pharr & R. D. Putnam (Eds.), *Disaffected democracies: What's troubling the trilateral countries?* (pp. 202-230). Princeton, NJ: Princeton University Press.
- Dresner, S., Jackson, T. and Gilbert, N. (2006). History and social responses to environmental tax reform in the United Kingdom. *Energy Policy*, *34*(8), 930-939.
- Drews, S., & Bergh, J. (2015). What explains public support for climate policies? A review of empirical and experimental studies. *Climate Policy*.
- Dreyer, S. J., & Walker, I. (2013). Acceptance and support of the Australian carbon policy. *Social Justice Research*, *26*(3), 343-362.
- Dreyer, S. J., Teisl, M. F., & McCoy, S. K. (2015). Are acceptance, support, and the factors that affect them, different? Examining perceptions of U.S. fuel economy standards. Transportation Research Part D. *Transport and Environment*, *39*, 65-75.
- Fairbrother, M. (2016). Trust and Public Support for Environmental Protection in Diverse National Contexts. *Sociological Science*, *3*, 359-382.
- FAO. (2018). Water use of livestock production systems and supply chains Guidelines for assessment (Draft for public review). Rome, Italy: Livestock Environmental Assessment and Performance (LEAP) Partnership.
- Fesenfeld, L.; Wicki, M.; Sun, Y.; Bernauer, T. 2020. (n.d.). Policy packaging can make food system transformation feasible. *Nature Food, 1*, 173-182.
- Gaunt, M., Rye, T., & Allen, S. (2007). Public acceptability of road user charging: the case of Edinburgh and the 2005 referendum. *Transp. Rev*(27), 82-102.
- Gerber, A. A. (2014). Reporting Guidelines for Experimental Research: A Report from the Experimental Research Section Standards Committee. *Journal of Experimental Political Science*, 1, 81-98.
- Gevrek, Z. E., & Uyduranoglu, A. (2015). Public preferences for carbon tax attributes. *Ecological Economics*, 111, 186-197.
- Green, P, Zelizer, A; Kirby, D. (2018). Publicizing Scandal. *Quarterly Journal of Political Science*, *13*(3), 237-61.
- Hammar, H., & Jagers, S. (2006). Can trust in politicians explain individuals' support for climate policy? The case of CO2 tax. *Climate Policy*, *5*, 613–625.

- Harring, N; Jagers, S. (2017). Why do people accept environmental policies? The prospects of higher education and changes in norms, beliefs and policy preferences. *Environmental Education Research*, 24(6), 791-806.
- Harring, N. (2014). The Multiple Dilemmas of Environmental Protection: The Effects of Generalized and Political Trust on the Acceptance of Environmental Policy Instruments. Gothenburg .
- Harring, N. & Jagers, S.C. (2013). Should We Trust in Values? Explaining Public Support for Pro-Environmental Taxes. *Sustainability*, 5(1), 210–227.
- Hassan, L; Shiu, E; Shaw, D. (2014). Who Says There is an Intention–Behaviour Gap? Assessing the Empirical Evidence of an Intention–Behaviour Gap in Ethical Consumption. *Journal of Business Ethics*, *136*, 219–236.
- Hetherington, M. (1998). The political relevance of political trust. *American Political Science Review*, 92(4), 791-808.
- Holland, P. (1986). Statistics and Causal Inference. *Journal of the American Statistical Association*, 81(396), 945-960.
- Inglehart, R., C. Haerpfer, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin & B. Puranen. (2014). World Values Survey: Round Six Country-Pooled Datafile Version.
- Jagers, S.C., Harring, N., Löfgren, Å., Sjöstedt, M., Alpizar F., Brülde, B., Langlet, D., Nilsson, A., Carney Almroth, B., Dupont, S., & Steffen, W. (2019). On the preconditions for largescale collective action. CeCAR Working Paper Series 1.
- Jimenez-Buedo, M., & Miller, L. M. (2010). Why a trade-off? The relationship between the external and internal validity of experiments. *Theoria. Revista de Teoría, Historia y Fundamentos de la Ciencia, 25*(3), 301-321.
- Kallbekken, S. & Sælen, H. (2011). Public acceptance for environmental taxes: self-interest, environmental and distributional concerns. *Energy Policy*, *39*(5), 2966–2973.
- Kallbekken, S., & Aasen, M. (2010). The demand for earmarking: Results from a focus group study. *Ecological Economics*, 69(11), 2183–2190.
- Keramitsoglou, K., & Tsagarakis, K. (2013). Public participation in designing a recycling scheme towards maximum public acceptance. *Resour. Conserv. Recycl.*(70), 55–67.
- Kucher, A.; Heldak, M.; Kucher, L.; Raszka, B. (2019). Factors Forming the Consumers' Willingness to Pay a Price Premium for Ecological Goods in Ukraine. *International Journal of Environmental Research and Public Health*, 16(5), 859.
- Kyselá, E; Ščasný, M; Zvěřinová, I. (2019). Attitudes toward climate change mitigation policies: a review of measures and a construct of policy attitudes. *Climate Policy*, *19*(7), 878-892.
- Levi, M. (1997). Consent, dissent, and patriotism. New York: Cambridge University Press.
- Mansbridge, J. (2014). The role of the state in governing the commons. *Environmental Science* & *Policy*, *36*, 8–10.
- Marien, S. & Hooghe, M. (2011). Does political trust matter? An empirical investigation into the relation between political trust and support for law compliance. *European Journal of Political Research*, 20 (2) 267-291

Martinsson, J. & Andersson, U. (2019). Swedish Trends 1986-2018. SOM Institute.

- McDermott, R. (2011). Internal and external validity. Cambridge Handbook of Experimental Political Science. (D. G. J.N. Druckman, Ed.) Cambridge University Press.
- Morris, S. & Klesner, J. (2010). Corruption and trust: Theoretical considerations and evidence from Mexico. *Comparative Political Studies*, 43 (10) 1258-1285
- Mutz, D. (2011). Population-Based Survey Experiments. Princeton University Press.
- O'Connor, R., & Bord, R. &. (1999). Risk Perceptions, General Environmental Beliefs, and Willingness to Address Climate Change . *Risk Analysis*, 461-471.
- Poore, J; Nemecek, T. (2018). Reducing food's environmental impacts through producers and consumers. *Science*, *360*(6392), 987-992.
- Robertson, D. (2020). *They are leading us to catastrophe': Sweden's coronavirus stoicism begins to jar*. Retrieved from https://www.theguardian.com/world/2020/mar/30/catastrophe-sweden-coronavirus-stoicism-lockdown-europe#maincontent
- Schade, J., & Schlag, B. (2003). Acceptability of Urban Transport Pricing Strategies. *Transportation Research Part F Traffic Psychology and Behaviour*, 6(1), 45-61.
- Stern, P.C.; Dietz, T.; Abel, T.; Guagnano, G.A.; Kalof, L. (1999). A Value-belief-norm theory of support for social movements: The case of environmentalism. *Hum. Ecol. Rev.*, 6, 81– 97.
- Svallfors, S. (2002). Political Trust and Support for the Welfare State: Unpacking a Supposed Relationship. In: In: Rothstein B., Steinmo S. (eds) *Restructuring the Welfare State: Political Institutions and Policy Change* (pp. 184-205).
- Thaker, J., Howe, P., Leiserowitz, A., & Maibach, E. (2019). Perceived Collective Efficacy and Trust in Government Influence Public Engagement with Climate Change-Related Water Conservation Policies. *Environmental Communication*, *13*(5), 681-699.
- Transparency International. (2020) CORRUPTION PERCEPTIONS INDEX 2019
- Tyler, T. (2006). Why people obey the law . Princeton, NJ: Princeton University Press.
- Uslaner, E. (2018). The Oxford Handbook of Social and Political Trust.
- Vaske, J., Absher, J., & Bright, A. (2007). Salient Value Similarity, Social Trust and Attitudes toward Wildland Fire Management Strategies. *Hum. Ecol. Rev.*(14), 223–232.
- WHO. (2020). *Reducing animal-human transmission of emerging pathogens*. Retrieved from https://www.who.int/health-topics/coronavirus/who-recommendations-to-reduce-risk-of-transmission-of-emerging-pathogens-from-animals-to-humans-in-live-animal-markets
- Wilson, R. & Eckel, C. (2017). Handbook on Trust and Social Exchange.
- Wiser, R. (2007). Using contingent valuation to explore willingness to pay for renewable energy: A comparison of collective and voluntary payment vehicles. *Ecological Economics*, 62(3), 419-432.
- Zahran, S., Brody, S., Vedlitz, A., & Grover, H. (2006). Climate Change Vulnerability and Policy Support. *Society & Natural Resources*, *19*(9), 771-789.
- Zhang, L.; Fukuda, H.; Liu, Z. (2019). Public willingness to pay for sand and dust weather mitigation: A case study in Beijing. *Journal of cleaner production*, *217*(3), 639-645.

# Appendix 1

# **Table 5 Randomisation control**

	F	Sig.
Public support	14.956	.000
Policy acceptability	.565	.688
Education	1.570	.212
Gender	.081	.922
Age	.231	.875

# Appendix 2 Survey experiment – Turkey

### a) Positive manipulation group



### **Climate Change**

Animal production is one of the largest sources of greenhouse gases emission (GHG) with contributions around 15% of all human induced GHG emissions.

#### **Policy Suggestion**

Imagine that a climate tax is going to be imposed by the Turkish government to decrease the meat consumption and in turn its harmful impact on the environment.



### b) Negative manipulation group

### **Study Survey**

Thank you for taking the time to complete the survey. It is completely confidential. In case you have any questions, do not hesitate to contact me at: <u>gusyavec@student.gu.se</u>

My name is Ecem Yavuz, studying at the University of Gothenburg. This survey is a part of my master thesis.

Please read the description and the following hypothetical policy proposal then answer the questions below:



#### Some facts about Turkey

• Turkey's population reached 83 million as of end of 2019.

The capital city of Turkey is Ankara.

• The corruption level in Turkey has increased gradually from 2013 until 2019 and the country has been witnessing several corruption scandals in its history.

#### **Climate Change**

Animal production is one of the largest sources of greenhouse gases emission (GHG) with contributions around 15% of all human induced GHG emissions.

### **Policy Suggestion**

Imagine that a climate tax is going to be imposed by the Turkish government to decrease the meat consumption and in turn its harmful impact on the environment.



### c) Control group

# **Study Survey**

Thank you for taking the time to complete the survey. It is completely confidential. In case you have any questions, do not hesitate to contact me at: <u>gusyavec@student.gu.se</u>

My name is Ecem Yavuz, studying at the University of Gothenburg. This survey is a part of my master thesis.

### **Policy Suggestion**

Imagine that a climate tax is going to be imposed by the Turkish government to decrease the meat consumption and in turn its harmful impact on the environment.

# Appendix 3 Survey experiment – Sweden

### a) Positive manipulation group



My name is Ecem Yavuz, studying at the University of Gothenburg. This survey is a part of my master thesis.

Please read the description and the following hypothetical policy proposal then answer the questions below:



#### Some facts about Sweden

· Sweden has about 10 million inhabitants.

· The capital city of Sweden is Stockholm.

 According to Transparency International's ranking Sweden is one of the least corrupt countries in the world.

### **Climate Change**

Animal production is one of the largest sources of greenhouse gases emission (GHG) with contributions around 15% of all human induced GHG emissions.

### Policy Suggestion

Imagine that a climate tax is going to be imposed by the Swedish government to decrease the meat consumption and in turn its harmful impact on the environment.



### b) Negative manipulation group

### Study Survey

Thank you for taking the time to complete the survey. It is completely confidential. In case you have any questions, do not hesitate to contact me at: <u>gusyavec@student.gu.se</u>

My name is Ecem Yavuz, studying at the University of Gothenburg. This survey is a part of my master thesis.

Please read the description and the following hypothetical policy proposal then answer the questions below:



#### Some facts about Sweden

· Sweden has about 10 million inhabitants.

· The capital city of Sweden is Stockholm.

 According to Transparency International's ranking Sweden is one of the least corrupt countries in the world.

#### **Climate Change**

Animal production is one of the largest sources of greenhouse gases emission (GHG) with contributions around 15% of all human induced GHG emissions.

### **Policy Suggestion**

Imagine that a climate tax is going to be imposed by the Swedish government to decrease the meat consumption and in turn its harmful impact on the environment.



### c) Control group

# **Study Survey**

Thank you for taking the time to complete the survey. It is completely confidential. In case you have any questions, do not hesitate to contact me at: <u>gusyavec@student.gu.se</u>

My name is Ecem Yavuz, studying at the University of Gothenburg. This survey is a part of my master thesis.

### **Policy Suggestion**

Imagine that a climate tax is going to be imposed by the Swedish government to decrease the meat consumption and in turn its harmful impact on the environment.

# Appendix 4 Questions for all groups

# Questions

### 1. How acceptable do you find the hypothetical policy proposal given above?

- completely acceptable
- □ slightly acceptable
- neutral
- □ slightly unacceptable
- □ completely unacceptable

2. Are you willing to bear some costs resulting from the policy to decrease the meat consumption, in turn, GHG emission? Would you vote in favour of such a policy?

□ Yes

□ No

#### 3. What is your education level?

- $\hfill\square$  No education or elementary school
- □ High school (graduated or current student)
- □ University (graduated or current student)

#### 4. What is your gender?

- □ Man
- Woman
- Other

### 5. How old are you?

- □ 18-26
- □ 27-49
- □ 50-64
- □ 65 or older