

# An experimental evaluation of the acceptability of meat taxes.\*

Evidence from Denmark, Germany, Netherlands and the United Kingdom

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OSLO RCT & Brown Bag Seminar. 3 December 2024.

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Sir Keir denied a fresh carbon crackdown will require people to turn vegetarian or rip out their boilers

Noa Hoffman | Martina Bet

Published: 11:26, 12 Nov 2024 | Updated: 12:59, 12 Nov 2024

# Overview of today's talk

- Context: Builds on three recent papers – why meat taxes are key, factors affecting support for meat taxes, the P.E. of meat taxes
- Data: Cross country (DK, GE, NL, UK) survey experiment (N=8,000+) with rep. samples.
- Experiment: Between (2x2) – within (DCE) experiment
- Methods: standard OLS (Hainmueller et al.,) with clustered s.e., LASSO, fe and multiple hypotheses corrections.
- Findings: (1) cost and fairness key to support (2) design matters, BIs of little use (3) Politics of meat tax is nuanced

# Background: Meat Facts

- ❖ Livestock contributes to 1/3 emissions, globally.
- ❖ Meat is carbon-intensive and environmentally damaging ([Scarborough et al., 2023](#); [Clark et al., 2022](#); [Clark et al., 2019](#); [Poore and Nemecek, 2018](#))
- ❖ Meat consumption projected to increase by 14% globally, levelling off in high-income countries by 2030 ([FAO 2021-2030 Outlook](#))
- ❖ Need to adopt “planetary health diets” to comply with Paris targets ([Willet et al., 2019](#) – EAT Lancet Commission)



# Background: Sustainable dietary transition needs behaviour change

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## Demand, Services and Social Aspects of Mitigation

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## ARTICLES

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## Visions of food systems at COP27

 Check for updates

**Food was finally on the menu at COP27, but divergences on the meaning of sustainable agriculture and what food systems should look like in the future may have limited progress on negotiations.**

negotiations was dedicated to agriculture and adaptation.

Yet, how do we, as the food community, reflect on the advance? The final document produced in the Koronivia Dialogue – the main forum at COP27 to address agriculture on the side of the negotiations – had the words ‘agroecology’ and ‘food systems’ removed from the text. The sole emphasis was on the supply side of food, while demand-related issues, such as food loss and waste or unsustainable consumption patterns, were omitted. The focus on supply could enable a purely carbon-based vision of agriculture to prevail, which isn’t in line with the holistic and integrated perspective needed for the transformation of food systems. Besides, old contradictions remain: Africa emits less than 4% of global greenhouse gas emissions, but will suffer the most with climate change and its impacts on food security; and finance doesn’t get to smallholders, even though they are the majority of the farmers around the world and feed most of the world population.

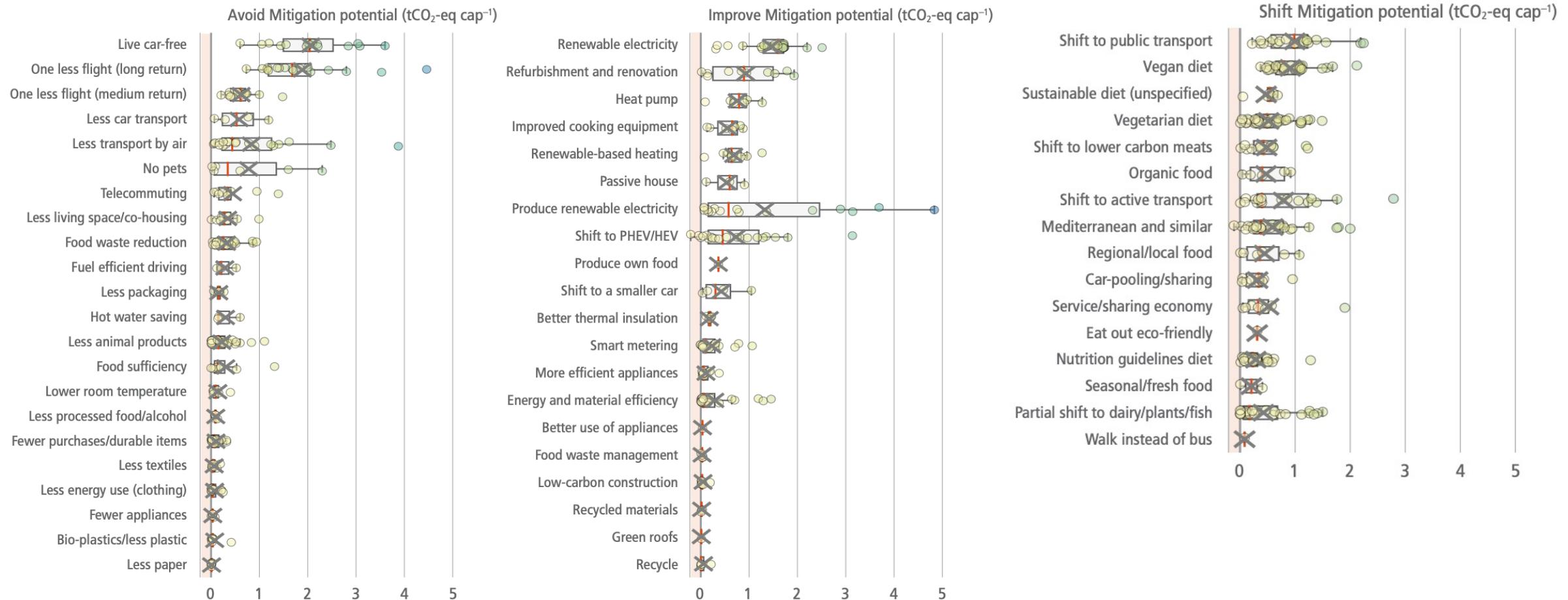
At the basis of these contradictions is a lack of agreement on what sustainable agriculture means and what food systems should look like in the future. Different pavilions at COP27 promoted disparate visions of the Global South, talks revolved around the persistence of hunger, measures to close the yield gap, and financing mechanisms to enhance farmers’ resilience to climate change and supply chain disruptions. Agriculture-driven deforestation and food impacts on biodiversity were also prominent topics for Brazil, Congo, Indonesia and other forest nations. And this year, for the first time, a day of official

it should be noted that industrial agriculture – primarily extractive, fossil-fuel-dependent and monoculture-focused – is set to benefit the most from the investments announced in Sharm El-Sheikh, directed to climate-smart agriculture and management intensification strategies to increase yields. Similarly, carbon markets and offsets might expand into the land and agriculture sector after COP27; unless safeguards are put in place, the primary focus on carbon might divert attention away from the root causes of agriculture’s climate impacts.

Having food on the COP agenda gives visibility to the food-climate nexus, creates awareness, fosters integrated policies, and leverages funds to the countries that need them. It also helps advance the operationalization of concrete pathways to achieve more nutritious, resilient and sustainable food systems – including the identification of questions that remain to be answered by scientists and researchers, so that effective, well-targeted policies can be implemented. Several parallels exist between the climate and food crises, and the food community can certainly learn from COPs. But the vision of food systems reflected in the final document of COP27 raises serious questions about their inclusion in the climate agenda, which was so hard-pushed for and debated at the United Nations Food Systems Summit. Now that food has made it to the COP, work is needed to align the food and climate communities, so that further progress can be achieved.

Published online: 15 December 2022

# Background: Carbon mitigation shift potential of meat-less strategies high.



# Current landscape of food policies?

(Reisch et al., 2013; Banerjee, 2024)

1. Contemporary food policy focuses largely on behaviourally informed public policies. These come in various flavours, but focuses mostly on (in red)

- a. Choice architecture (a.k.a. nudges)
- b. Decision tools (such as information)
- c. Some combinations and variations of the above

2. Limited range of fiscal policies (in blue) → nothing that has been implemented so far

Table 2 Framework of policy instruments to promote sustainable food systems.

Instruments/ Issues	Information-based	Market-based	Regulatory	Self-committing
Health aspects	<ul style="list-style-type: none"> <li>• Publicly question current meat and dairy consumption levels</li> <li>• Integrate food-related SCP considerations into formal curricula<sup>d</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Increase VAT on meat products or fat (fat tax, junk-food tax)<sup>f</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Limit advertising and other forms of stealth marketing for unhealthy food and drink</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce the number of meat dishes in public sector cafeterias</li> <li>• Increase share of organic and vegetarian food in public sector cafeterias</li> <li>• Establish voluntary agreements with retailers and main industry players on choice editing</li> </ul>
Organic food	<ul style="list-style-type: none"> <li>• Develop national organic labels</li> <li>• Highlight environmental consequences of individual food purchasing choices</li> <li>• Integrate food-related SCP considerations into formal curricula<sup>d</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Provide subsidies for farms during conversion and those involved in organic production</li> <li>• Support marketing of organic products and foodstuffs</li> <li>• Implement tradable nitrogen quotas<sup>a</sup></li> <li>• Place a tax on harmful pesticides<sup>a</sup></li> <li>• Lower VAT for organic products</li> </ul>	<ul style="list-style-type: none"> <li>• Simplify distribution of organic products and foodstuffs<sup>a</sup></li> <li>• Introduce "green accounts" for farmers<sup>a</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Increase share of organic food in public sector cafeterias</li> <li>• Increase range of organic food available in retail markets</li> </ul>
GHG emissions	<ul style="list-style-type: none"> <li>• Highlight environmental consequences of individual food-purchasing choices, e.g., via carbon labeling or the Nutrient Density to Climate Impact (NDCI) index<sup>1</sup></li> <li>• Promote food-waste reduction</li> <li>• Integrate food-related SCP considerations into formal curricula<sup>d</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Tax food products with high emissions, e.g., higher VAT on meat and dairy products.</li> <li>• Introduce CO<sub>2</sub> taxes.</li> <li>• Implement tradable nitrogen quotas<sup>e</sup></li> <li>• Promote organic farming<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Develop CAP in a more sustainable direction.</li> <li>• Introduce production quotas on meat and/or animal products.</li> <li>• Develop and implement clear sustainability targets<sup>d</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Increase range of regional food available in retail markets</li> </ul>
Food waste	<ul style="list-style-type: none"> <li>• Design and carry out awareness campaigns, including school programs</li> </ul>	<ul style="list-style-type: none"> <li>• Initiate taxes or fees on food wasted in production and in the retail system</li> <li>• Introduce pay-as-you-throw (PAYT) schemes for households</li> </ul>	<ul style="list-style-type: none"> <li>• Critically test existing food-safety standards<sup>2</sup></li> <li>• Eliminate legal barriers that can lead to wastage<sup>2</sup></li> <li>• Develop monitoring plans to ensure voluntary agreements are followed<sup>e</sup></li> <li>• Phase out export subsidies</li> </ul>	<ul style="list-style-type: none"> <li>• Increase range of regional food available in retail markets</li> <li>• Voluntary agreements on "buy one get one for free" campaigns</li> </ul>
"Mind and markets" gap between food consumption and production	<ul style="list-style-type: none"> <li>• Integrate food-related SCP considerations into formal curricula<sup>d</sup></li> </ul>			<ul style="list-style-type: none"> <li>• Increase range of regional food available in retail markets</li> <li>• Stimulate retailers to develop sustainable food strategies</li> </ul>

# Some reflections on this landscape:

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1. Behaviourally informed policies work fairly OK, but they are limited in their scope. We need to overcome following problems:
  - a. Loose definition (Banerjee & John, 2023)
  - b. Effectiveness of nudges is low (Mertens et al., 2022; Maier et al., 2022)
  - c. Effectiveness of nudges decays over time (Dellavigna & Linos, 2022) → 7p.p. decrease with 1 day of nudge retraction.
  - d. Nudges are perceived as unethical, especially for meat-demand (Lades & Nova, 2024; Lemken, Erhard & Wahnschafft, 2024).
  - e. Nudges do not allow for personalisation, “one-size-fits-all” approach does not work (Mills, 2020).

# Some reflections on this landscape:

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1. Behaviourally informed policies work fairly OK, but they are limited in their scope. We need to overcome following problems:
2. Meat taxes are inevitable, yet we shy away from them. This is caused by major misbeliefs and misperceptions (Banerjee, *R&R, Food Policy*):
  - a. Meat taxes are (NOT) not optimal
  - b. Meat taxes are (NOT) regressive
  - c. Meat taxes are (NOT) unpopular
  - d. Meat taxes are (NOT) bad and particularly made to look so by lobbyists
  - e. Meat taxes are (NOT) the only solution

# Some reflections on this landscape:

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1. Behaviourally informed policies work fairly OK, but they are limited in their scope. We need to overcome following problems:
2. Meat taxes are inevitable, yet we shy away from them. This is caused by major misbeliefs (Banerjee, *R&R, Food Policy*)
3. Behavioural OR economic policies will never become the silver bullet. Behavioural AND economic policies might just be.
  - a. Nudges have been seen as a silver bullet for too long. Doesn't work that way!
  - b. Suggestive that behavioural policies can often facilitate introduction of harder policies (Shreedhar & Gravert, 2022; Faciolli et al., 2022)

# But, what's the alternative?

- ❖ Meat taxes are first-best solution to internalise harms (“polluter-pays principle”), meat consumer taxes are second-best ([Funke et al., 2022](#))
- ❖ Limited cases of global meat taxation. Low acceptability, low public support, lack of government drive ([Grimsrud et al., 2020](#))
- ❖ Recent work suggests that combining taxes and behavioural nudges work better ([Gravert & Shreedhar, 2022](#); [Faciolli et al., 2022](#))



# Research Questions

Based on this background, context and literature we investigate THREE main research questions:

- RQ 1: How can we design a meat tax that is legitimate and acceptable to people?
- RQ 2: Can we use behavioural interventions to improve the acceptability of a meat tax?
- RQ3: How does support vary by the politics of meat (non-PAP stuff)

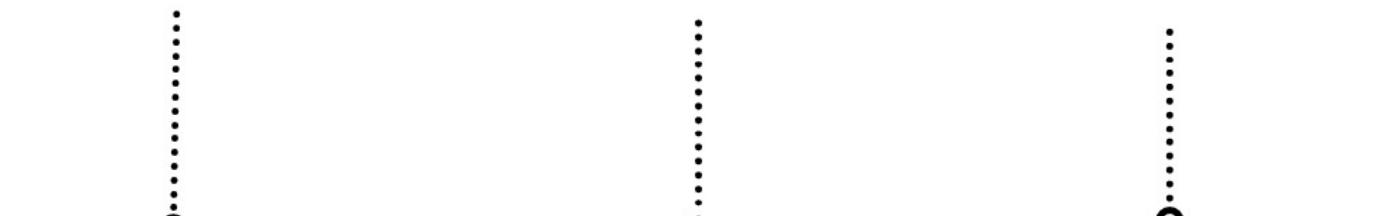
# It all started with the NL: Why?

- By 2030, NL government aimed for the average diet to consist of 50% animal and 50% vegetable protein, instead of the current 60 / 40 ratio.
- NL faced elections in November 2023 and meat tax was a (leading?) agenda on the table. In September 2023, proposals were sent to the Dutch Parliament.
- NL was one of the forerunners exploring the implementation of a meat tax (also DK, DE, SE), sadly Denmark leads now!

## POLITICAL TIMELINE MEAT TAX DEBATE

### Early 2000's

The concept of a meat tax is introduced in the House of Representatives



Party for the Animals files a motion calling for the government to consider an excise tax on meat, which gets rejected.

Written questions, motions and debates all touch upon a meat tax. The Party for the Animals again file several motions which get rejected.

### 2010'S

The concept is often part of the political agenda, but no concrete measures are taken

2021

Minister of Agriculture Carola Schouten commissions studies towards real meat pricing.

### 2020-2023

The meat tax is high on the political agenda

2022

- Minister of Agriculture Henk Staghouwer announces intention to explore possibility regarding meat tax.
- Party for Freedom files motion to reject a meat tax, which is adopted.

2023

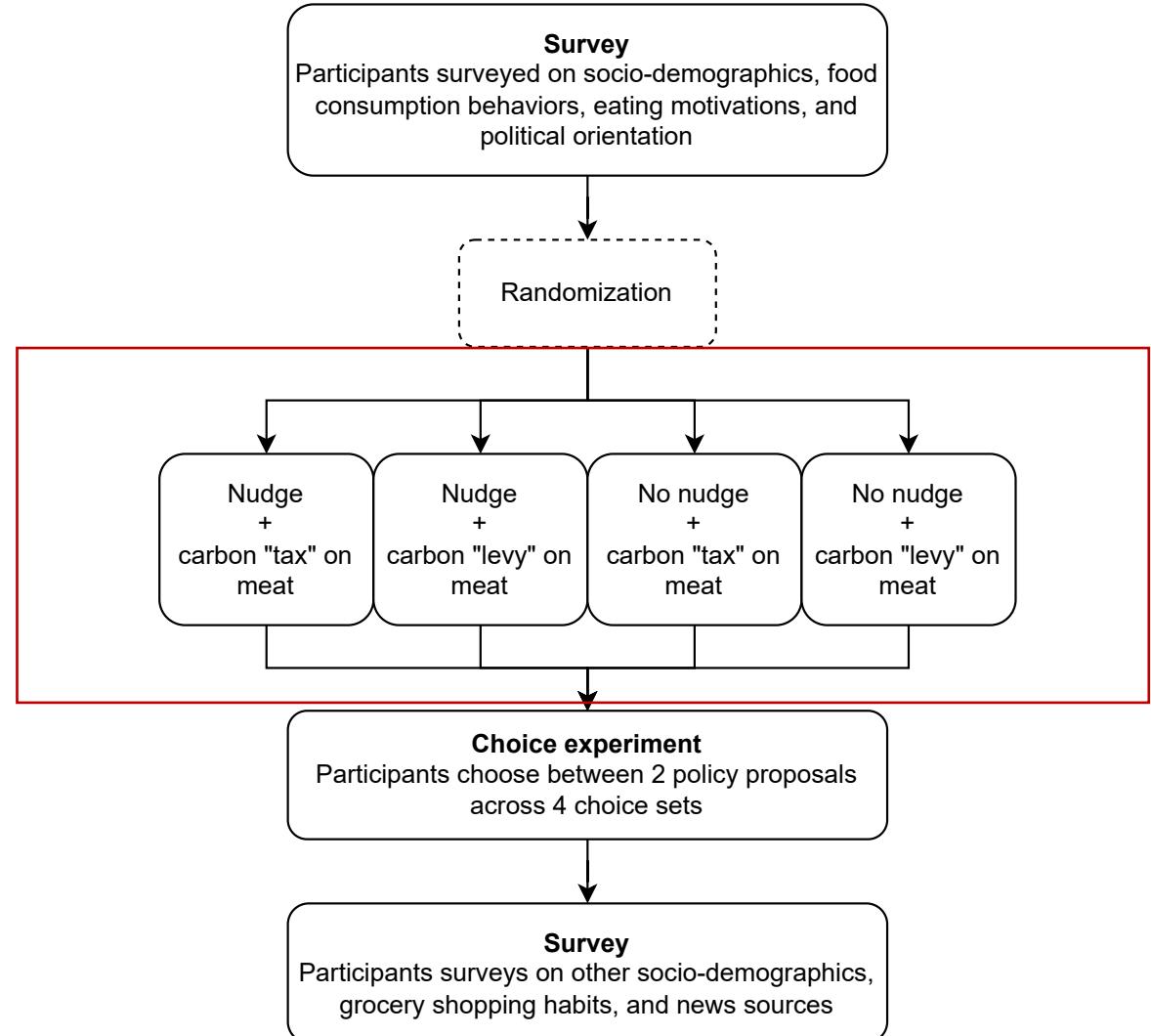
Minister of Climate Rob Jetten receives advice to introduce meat tax as part of his climate plans, to which he does not comply.

A long history of meat tax debate in the NL

# Study Design

# Experimental Design

- Pre-registered experiment (OSF)
- Between Subject
  - 2 (framing) x 2 (reflection) factorial design experiment
- Within Subject
  - Conjoint attributes/levels
  - 6 choice sets between two policy proposals



# Between-subjects Design

We design a 2x2 factorial experiment, where we vary:

1. The **framing of the tax**: either called a “Meat Tax” or a “Meat Levy”
2. The **degree of reflection** on the current political environment: either encouraged to reflect or not

Last year, tax/levy was proposed by the Dutch parliament. This would affect the price of meat for everyone. Currently, some political parties are against this proposal (e.g. Boer Burger Beweging) while others are in favor (e.g. Groen Links). Think about the pros and cons of this policy proposal and tell us your honest opinion in a few lines.”

		Reflection	
		Nudge	Levy
Reflection	No	Nudge “Tax” frame	Nudge “Levy” Frame
	Yes	Nudge+ “Tax” frame	Nudge+ “Levy” Frame

Figure 1: Between-subjects design

# Within-Subjects Design: DCE

Four attributes, 6 choice sets (D-efficient full design)

**“Costs:** Hidden costs (such as damage to the environment due to meat production) can be included in the price. The lowest rate of the tax/levy is 10% of the hidden costs of meat, while the highest rate of the tax/levy is 100%. Differential pricing for meat: Chicken, pork and beef will increase in price differently.

**Revenues:** The tax/levy revenues can be used to subsidize the cost of fruits, vegetables and legumes, to compensate low-income families, or they may not be allocated to a specific purpose.

**Policy Scope:** The tax/levy can be implemented across the EU or just in the Netherlands.

**Motivation:** The tax/levy may benefit your personal and public health, animals or the environment.”

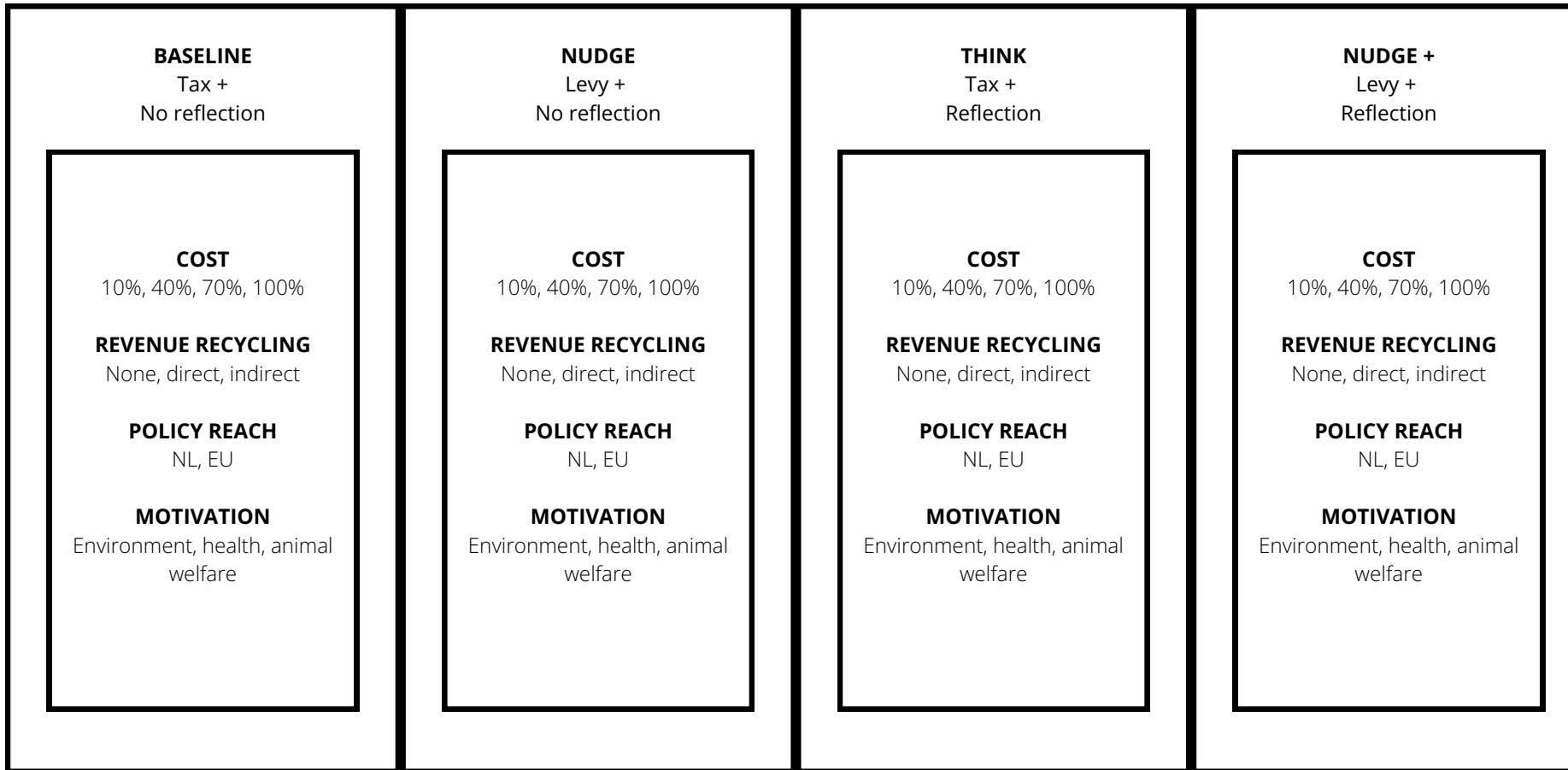
# Differential costs based on the Social Cost of Carbon (SCC)

**Table 1.** Tax rate by type of meat (€/kg meat)

	10% of hidden costs	40% of hidden costs	70% of hidden costs	100% of hidden costs
Beef	€ 0.52	€ 2.08	€ 3.64	€ 5.20
Pork	€ 0.41	€ 1.64	€ 2.87	€ 4.10
Chicken	€ 0.18	€ 0.72	€ 1.26	€ 1.80

*Note.* Calculations taken from CE Delft, 2020. Calculations reflect the environmental costs of greenhouse gas emissions causing climate change, other emissions causing environmental pollution, land use-related impacts on biodiversity, and livestock diseases.

# Within- and between-subjects design in a frame



# Survey design

	<b>Policy Scenario 1</b>	<b>Policy Scenario 2</b>
<b>Cost</b>	10% of hidden costs   	100% of hidden costs   
<b>Policy reach</b>	Policy is implemented EU wide	Policy is implemented EU wide
<b>Revenue uses</b>	Revenues are used to subsidize fruits, vegetables, and legumes	Revenues are not allocated to a specific goal
<b>Motivation</b>	To improve personal and public health	To improve animal welfare

Which one of the two policy scenarios are you more likely to support?

Policy scenario 1

Policy scenario 2

On a scale of 0-10, how likely are you to support policy scenario 1, if it was implemented by the government?

Not at all likely

Extremely likely



On a scale of 0-10, how likely are you to support policy scenario 2, if it was implemented by the government?

Not at all likely

Extremely likely



# Hypotheses (pre-reg)

## **Within-subjects design:**

- H1: Revenue recycling (direct or indirect) will increase policy support compared to no revenue recycling, on average.
- H2: Policy proposals motivated by animal welfare will increase policy support compared to other rationales (environmental quality and/or health), on average.

## **Between-subjects design:**

- H3: Policies framed as a “levy” will increase policy support compared to policies framed as a “tax”, on average.
- H4: A nudge+ policy frame will increase policy support compared to a pure nudge policy frame, on average.
- H5: Reflection will increase policy support more for the “levy” frame compared to the “tax” frame, on average.

# Data Collection

- ❖ Survey design via Qualtrics
- ❖ Panel providers: Panel Inzicht in Netherlands; Norstat in Denmark; Billendi in Germany, Prolific in UK
- ❖ Representative sample
  - ❖ Quotas on age, gender, education and subnational regions
- ❖ Exclusion criteria
  - ❖ Vegetarians/vegans
  - ❖ Failed (first) attention check
- ❖ N = 2000 IN UK, 2030 in Netherlands, 2000 in Denmark, 2000 in Germany (based on ex-ante power analysis with ex-ante multiple hypothesis correction). See [OSF preregistration](#).

# Preregistered Methods

For within-subjects experiment:

- ❖ Ordinary Least Squares Estimation yields ACMEs (as per Hainmueller et al., 2014)
- ❖ Standard errors clustered at the respondent level

For between-subjects design:

- ❖ Interaction with treatment dummies.

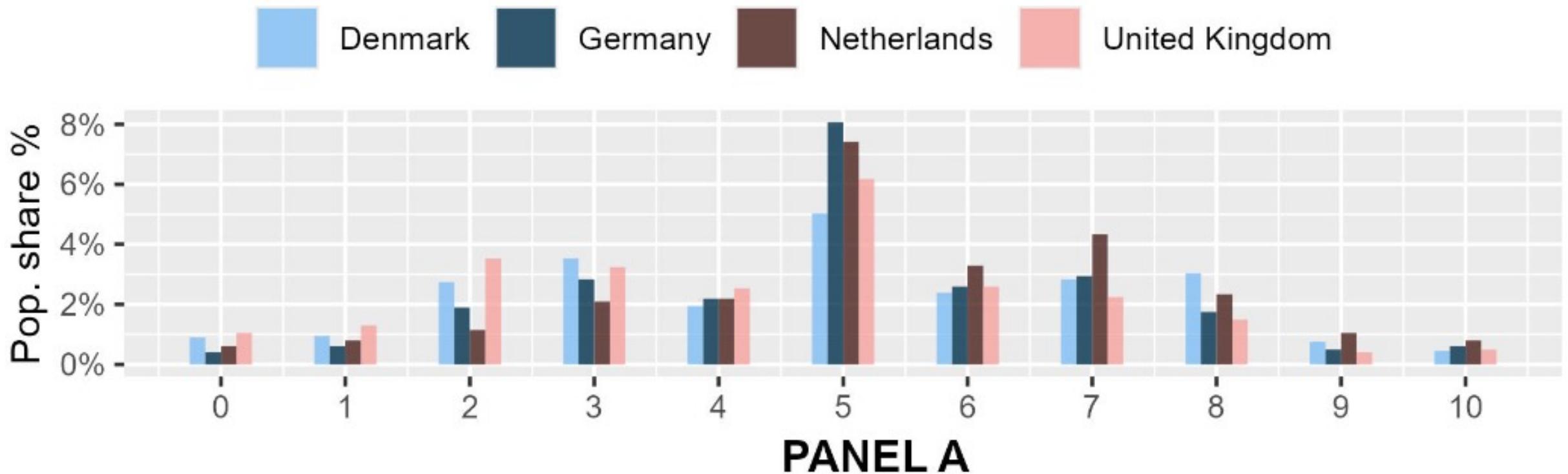
Robustness: Country fixed-effects for NL and DK. We use LASSO to control for covariates (Bloniarz et al., 2015). We also computer CACE using an IV strategy. We use Young (2019) for joint- and multiple-hypothesis testing.

# Descriptives

	Germany	Denmark	Netherlands	United Kingdom	
Age in years (SD)	47.28 (17.34)	48.74 (16.21)	51.44 (17.45)	45.40 (15.87)	<0.001
Gender (%) Male	255 (51.8)	256 (52.4)	264 (50.7)	244 (49.1)	0.744
Urbanicity (%) Urban	374 (75.9)	382 (78.1)	404 (77.2)	313 (62.2)	<0.001
<i>Education (%)</i>					<0.001
Lower	169 (34.3)	86 (17.6)	90 (17.2)	1 ( 0.2)	
Intermediate	129 (26.2)	274 (56.0)	221 (42.3)	225 (44.9)	
Higher	195 (39.6)	129 (26.4)	212 (40.5)	275 (54.9)	
<i>Income (%)</i>					<0.001
<26k	75 (20.2)	134 (29.8)	107 (24.3)	136 (27.0)	
26k-43k	100 (26.9)	138 (30.7)	140 (31.8)	76 (15.1)	
43-62k	60 (16.1)	98 (21.8)	106 (24.1)	116 (23.1)	
>62k	137 (36.8)	80 (17.8)	87 (19.8)	175 (34.8)	
<i>Employment</i>					<0.001
Unemployed	229 (74.4)	221 (72.2)	195 (61.3)	251 (49.9)	
Part-time	74 (24.0)	82 (26.8)	117 (36.8)	77 (15.3)	
Full-time	5 ( 1.6)	3 ( 1.0)	6 ( 1.9)	175 (34.8)	
N	493	489	523	503	

Table 1: Socio-demographics by country

# Descriptives



# Main Findings:

Result 1(a): Costs matter a lot...

	<i>Dependent variable: selected policy</i>			
	(1)	(2)	(3)	(4)
<i>Main effects:</i>				
Cost: 40%	0.731*** (0.047)	1.008 (0.114)	1.008 (0.114)	1.122 (0.160)
Cost: 70%	0.503*** (0.049)	0.856 (0.125)	0.856 (0.125)	0.831 (0.177)
Cost: 100%	0.394*** (0.055)	0.775 (0.136)	0.775 (0.136)	0.941 (0.198)
Revenue: Direct	2.172*** (0.044)	2.896*** (0.107)	2.896*** (0.107)	3.101*** (0.157)
Revenue: Indirect	1.716*** (0.044)	2.964*** (0.111)	2.964*** (0.111)	2.610*** (0.170)
Motivation: Animal Welfare	0.999 (0.041)	0.898 (0.104)	0.897 (0.104)	0.854 (0.142)
Motivation: Health	1.019 (0.039)	0.823* (0.096)	0.823* (0.096)	0.988 (0.141)
Policy: EU	1.278*** (0.035)	1.406*** (0.087)	1.406*** (0.087)	1.126 (0.120)
Ideology	0.999 (0.002)	1.126*** (0.023)	1.126*** (0.023)	1.142*** (0.033)
Controls	No	No	No	Yes
Fixed Effects (FE)	No	No	Yes	Yes
Observations	18,060	18,060	18,060	9,276
Log Likelihood	-11,996.080	-11,945.960	-11,945.940	-6,159.566
Akaike Inf. Crit.	24,012.160	23,927.910	23,931.880	12,395.130

Notes: Table presents the AMCEs from a logistic regression model. Clustered standard errors in parentheses. Inference: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ . Column 4 controls for covariates, namely, age, gender, education, urbanicity, employment, income

# Main Findings:

Result 1(a'): Costs matter a lot...but not when you control for one's political standing (more later on this)

	<i>Dependent variable: selected policy</i>			
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Ideology	0.999 (0.002)	1.126*** (0.023)	1.126*** (0.023)	1.142*** (0.033)
Controls	No	No	No	Yes
Fixed Effects (FE)	No	No	Yes	Yes
Observations	18,060	18,060	18,060	9,276
Log Likelihood	-11,996.080	-11,945.960	-11,945.940	-6,159.566
Akaike Inf. Crit.	24,012.160	23,927.910	23,931.880	12,395.130

Notes: Table presents the AMCEs from a logistic regression model. Clustered standard errors in parentheses. Inference: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ . Column 4 controls for covariates, namely, age, gender, education, urbanicity, employment, income

# Main Findings:

Result 1(a): Costs matter a lot...but not when you control for one's political standing

Result 1(b): Revenue recycling (and how you earmark) matters regardless.

	<i>Dependent variable: selected policy</i>			
	(1)	(2)	(3)	(4)
<i>Main effects:</i>				
Cost: 40%	0.731*** (0.047)	1.008 (0.114)	1.008 (0.114)	1.122 (0.160)
Cost: 70%	0.503*** (0.049)	0.856 (0.125)	0.856 (0.125)	0.831 (0.177)
Cost: 100%	0.394*** (0.055)	0.775 (0.136)	0.775 (0.136)	0.941 (0.198)
Revenue: Direct	2.172*** (0.044)	2.896*** (0.107)	2.896*** (0.107)	3.101*** (0.157)
Revenue: Indirect	1.716*** (0.044)	2.964*** (0.111)	2.964*** (0.111)	2.610*** (0.170)
Motivation: Animal Welfare	0.999 (0.041)	0.898 (0.104)	0.897 (0.104)	0.854 (0.142)
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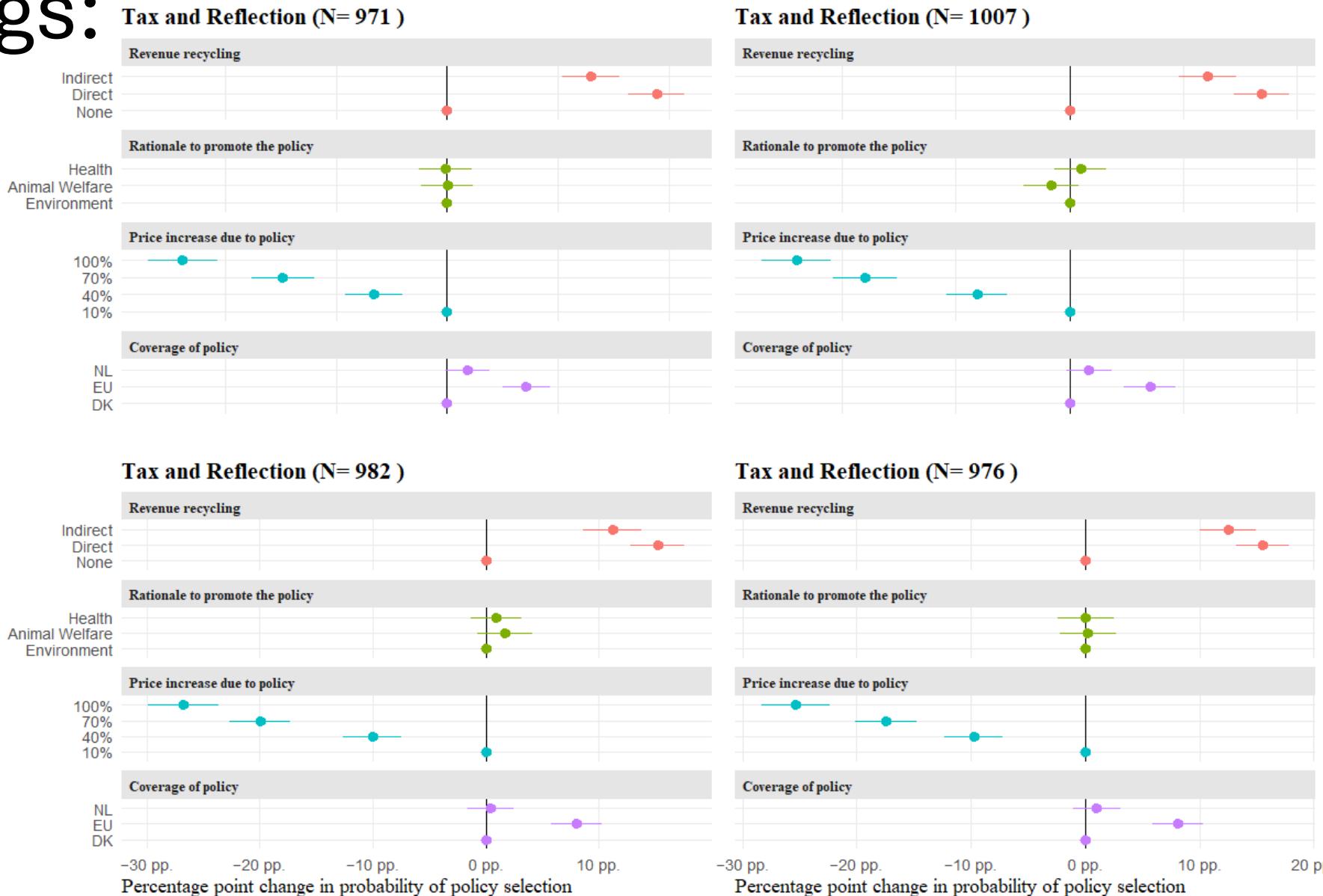
Result 1(d): Distributional fairness matters

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	(1)	(2)	(3)	(4)
<i>Main effects:</i>				
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# Main Findings:

**Result 2:**  
**Framing (as “tax” v/s “levy”) and reflection (deliberation) are both ineffective! No heterogeneity across countries.**



# Main Findings:

**Result 3: The politics of meat is nuanced and multidimensional (unlike thought).**

a. Right leaning folks hate higher prices (also see Jelveh, 2024, *EJ*)

Ideology	0.999 (0.002)	1.126*** (0.023)	1.126*** (0.023)	1.142*** (0.033)
<i>Interaction effects:</i>				
40% × Ideology		0.939** (0.021)	0.939** (0.021)	0.924** (0.029)
70% × Ideology		0.901*** (0.023)	0.901*** (0.023)	0.909** (0.030)
100% × Ideology		0.876*** (0.025)	0.876*** (0.025)	0.849*** (0.034)
Direct × Ideology		0.946** (0.019)	0.946** (0.019)	0.923** (0.027)
Indirect × Ideology		0.899*** (0.020)	0.899*** (0.020)	0.897*** (0.030)
Animal Welfare × Ideology		1.021 (0.019)	1.021 (0.019)	1.033 (0.025)
Health × Ideology		1.042* (0.017)	1.042* (0.017)	1.000 (0.024)
EU × Ideology		0.982 (0.015)	0.982 (0.015)	1.012 (0.020)
Constant	0.923 (0.051)	0.501*** (0.127)	0.502*** (0.127)	0.528** (0.195)
Controls	No	No	No	Yes
Fixed Effects (FE)	No	No	Yes	Yes
Observations	18,060	18,060	18,060	9,276
Log Likelihood	-11,996.080	-11,945.960	-11,945.940	-6,159.566
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**Result 3: The politics of meat is nuanced and multidimensional (unlike thought).**

a. Right leaning folks hate higher prices (also see Jelveh, 2024, *EJ*)

b. Also hate revenue recycling

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# Main Findings:

**Result 3: The politics of meat is nuanced and multidimensional (unlike thought).**

- a. Right leaning folks hate higher prices (also see Jelveh, 2024, *EJ*)
- b. Also hate revenue recycling
- c. Also motivated by health.

Ideology	0.999 (0.002)	1.126*** (0.023)	1.126*** (0.023)	1.142*** (0.033)
<i>Interaction effects:</i>				
40% × Ideology		0.939** (0.021)	0.939** (0.021)	0.924** (0.029)
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# Main Findings:

Result 4: Fundamental differences in distribution of people's support based on their political leaning that is largely explained by their **social identities** and **values** (Schwartz values) and validated by their preferences for political parties (next page).

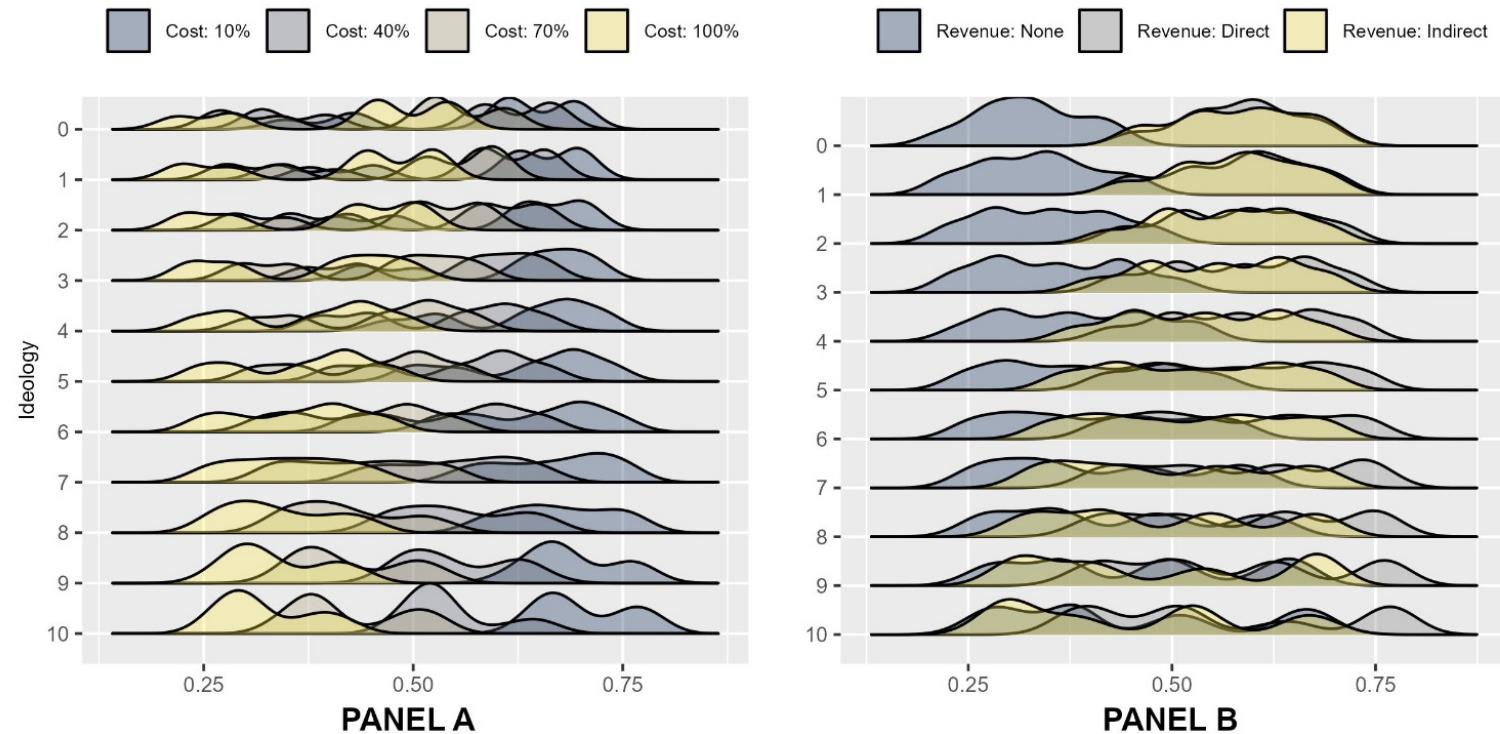
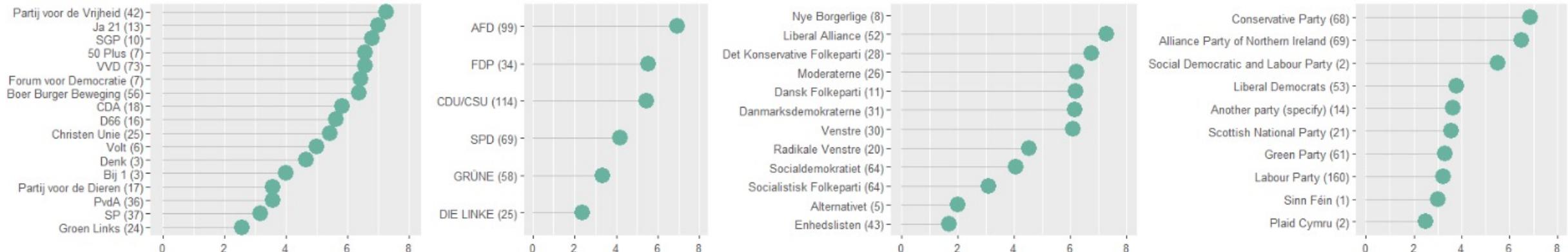


Figure 2: Predicted support across levels of cost increase and revenue recycling per self-reported political ideology.

# Main Findings:

## PANEL A



## PANEL B

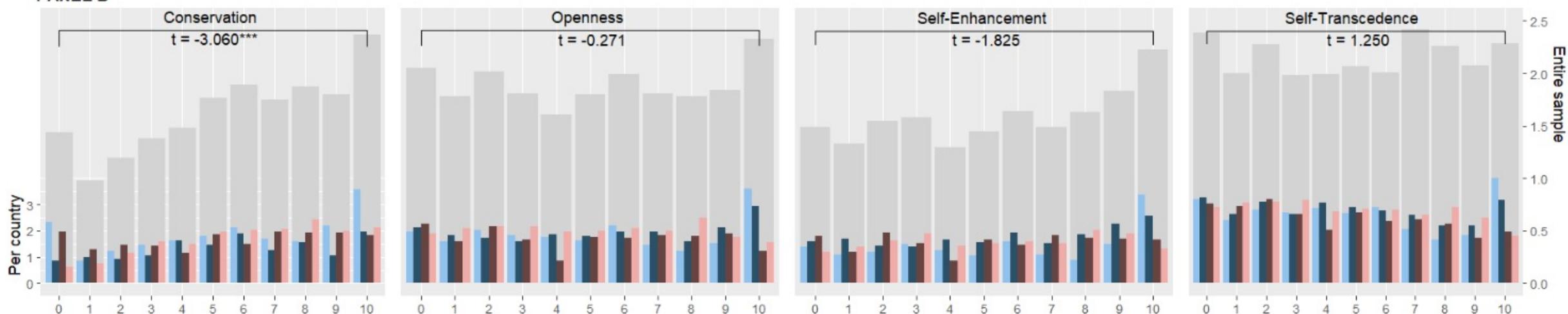


Figure 3: Schwartz values and party support across political left-right scale.

# Discussion – Policy Design is key

1. Importance of policy design in shaping support
2. Support is primarily driven by economic and fairness considerations
  - Higher rates are less acceptable (Fesenfeld et al., 2020; Beiser-McGrath & Bernauer, 2019)
  - Earmarking revenues increases support, but no difference between uses (Fesenfeld et al., 2020)
  - In contrast to findings from Beiser-McGrath & Bernauer, 2019, revenues used to support low-income families boosts support
  - Support sensitive to behavior in the rest of the EU (Beiser-McGrath & Bernauer, 2019)
3. Motivation behind policy does not drive support
  - Contrary to expectations, animal welfare motives were not any better supported than environmental or health motives (Perino & Schwickert, 2023)

# Discussion – If you get the tax wrong, behavioural instruments cannot help

- We find that less intrusive cosmetic (framing as levy vs. tax) and nudge + interventions aren't enough to sig. influence support for a meat tax
- In contrast to previous findings in DE (Perino & Schwickert, 2023)

# Discussion – Right backing a meat tax too?

- Contrary to expectations, meat taxes can be designed for those leaning right as well
- Unique fault lines along several dimensions of meat tax.
- The politics of meat is multidimensional and nuanced (like climate change politics).

# Thank You!

For comments or questions, please reach out to me:

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