



# The Politics of Vaccine Hesitancy in Europe

Florian Stoeckel (Exeter), Charlie Carter (Exeter/LSE), Ben Lyons (Utah), Jason Reifler (Exeter)



Scheduled paper

## Public Support for Conspiratorial Thinking in Europe

Slides are on my website; email me for more information

## The Politics of Vaccine Hesitancy

Relevant topic already before pandemic, now even more pressing issue

Research question: How are citizens' political attitudes related to vaccines hesitancy?



# Vaccine hesitancy

- Research in other fields (e.g. medicine): role of misperceptions, e.g. about risks
- Kennedy (2019) links country level vaccine hesitancy to the strength of populist parties
- lack of individual level analyses
- Next slides: hypotheses, analysis, results



# How do political attitudes relate to vaccine hesitancy?

## Anti elite world view

Lack of trust in elites and experts: Larson et al., 2018, Hornsey and Fielding, 2017

E.g. debate in the UK: "People in this country have had enough of experts"

**H1:** An anti-elite worldview is associated with greater vaccine hesitancy.



# How do political attitudes relate to vaccine hesitancy?

## Political orientations

Left-right ideology?

Culturally open versus closed positions

→ gal-tan dimension: Hooghe et al. 2002; Kriesi et al. 2012

→ Cultural backlash argument: Norris and Inglehart, 2019

**H2:** Culturally closed attitudes rather than open ones are associated with greater vaccine hesitancy.



# How do political attitudes relate to vaccine hesitancy?

Other variables in the model: SES, health care system effort etc.

Strength of populist parties:

- Misperceptions of risks related to vaccines explain hesitancy
- populist parties might mobilise these misperceptions

**H4c:** Populist parties increase the role of vaccine misperceptions for vaccine hesitancy.



# Data and method

## Eurobarometer survey from 2019

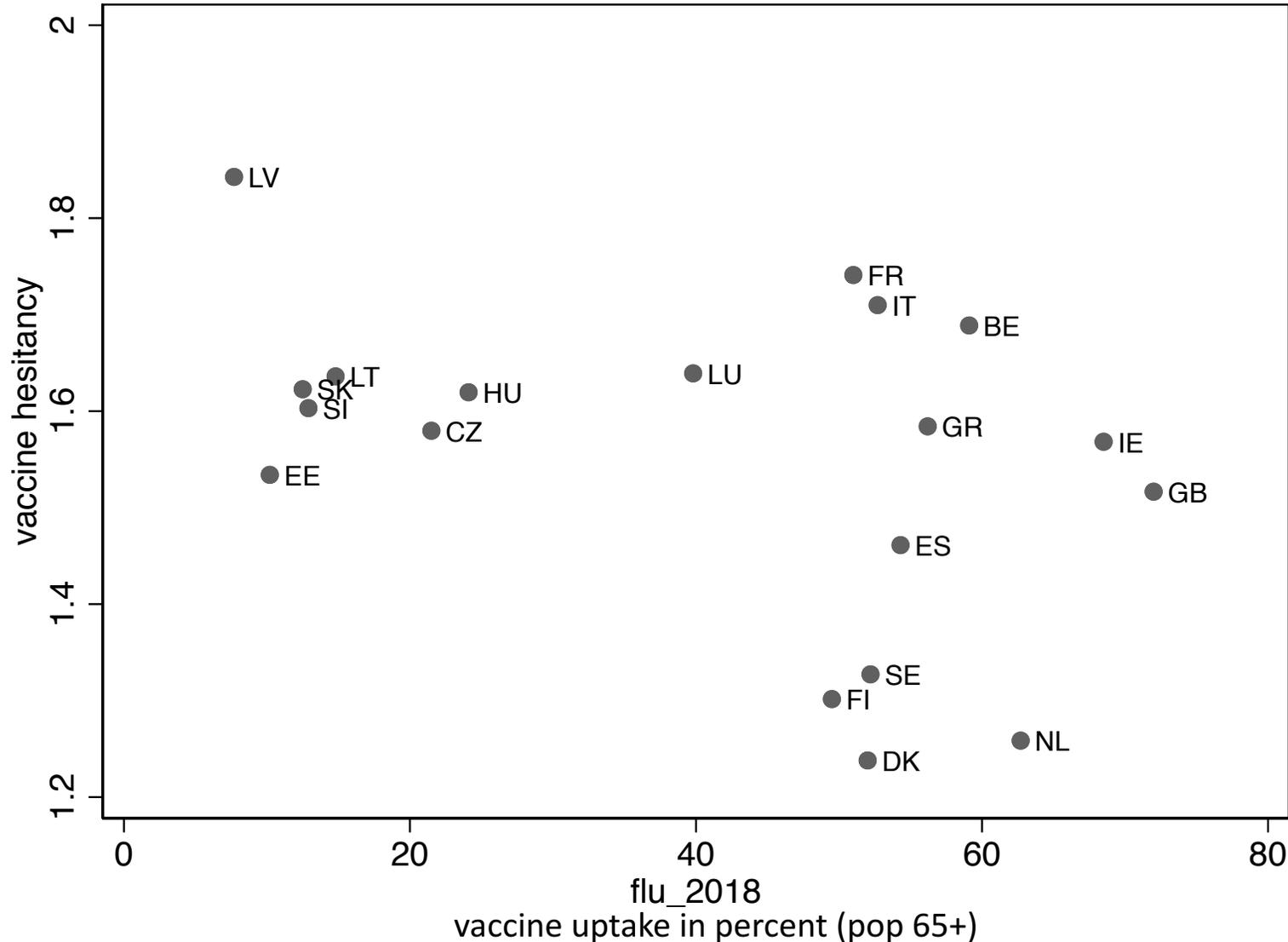
- 1000 respondents from each of the 28 EU member states
- vaccine hesitancy measure (5 items, Cronbach's  $\alpha$  is .82)
- multilevel model to account for clustered structure of the data

## Sources for other data:

- World Health Organisation data on vaccine coverage rates from 2018
- Populist party coding: follows Norris and Inglehart 2019, Kennedy 2019, Chapel Hill Expert Survey



# Vaccine hesitancy: related to vaccine uptake?



Vaccine hesitancy correlations with vaccine uptake:

Country level (N=28):

MCV1 -.15

DTP3 -.33<sup>+</sup>

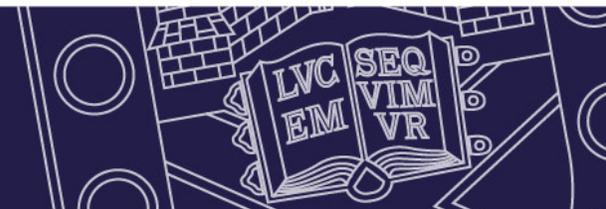
Influenza vacc. -.40<sup>+</sup>

Regional level (N=208):

MCV1 -.36<sup>\*</sup>

DTP3 -.26<sup>+</sup>

\* p < .05, + p < .10

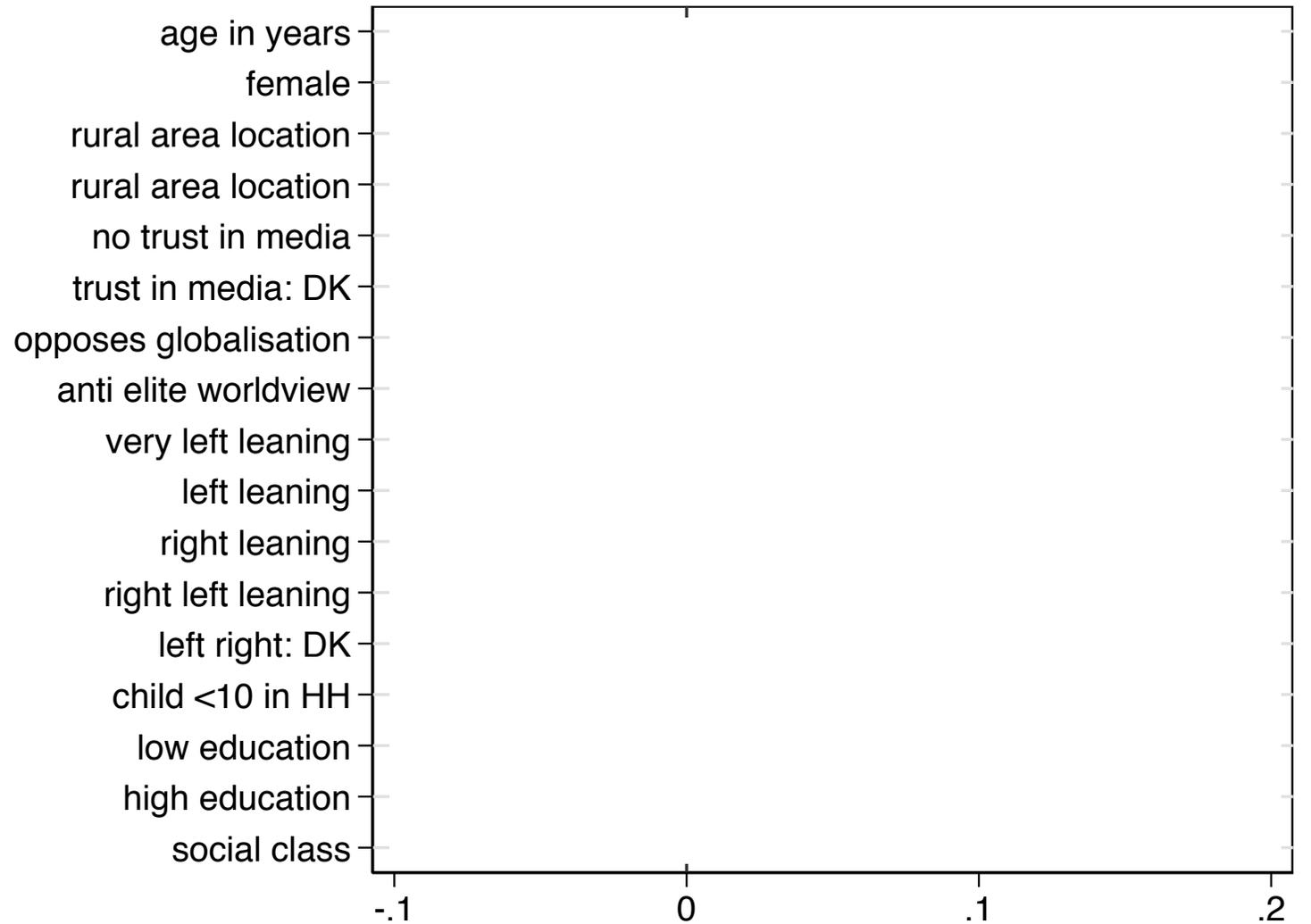


# Marginal effect of each variable on vaccine hesitancy

## Results

Vaccine hesitancy:  
Range 0-3

Multilevel model  
All variables rescaled to a  
range of 0-1 for easier  
interpretation



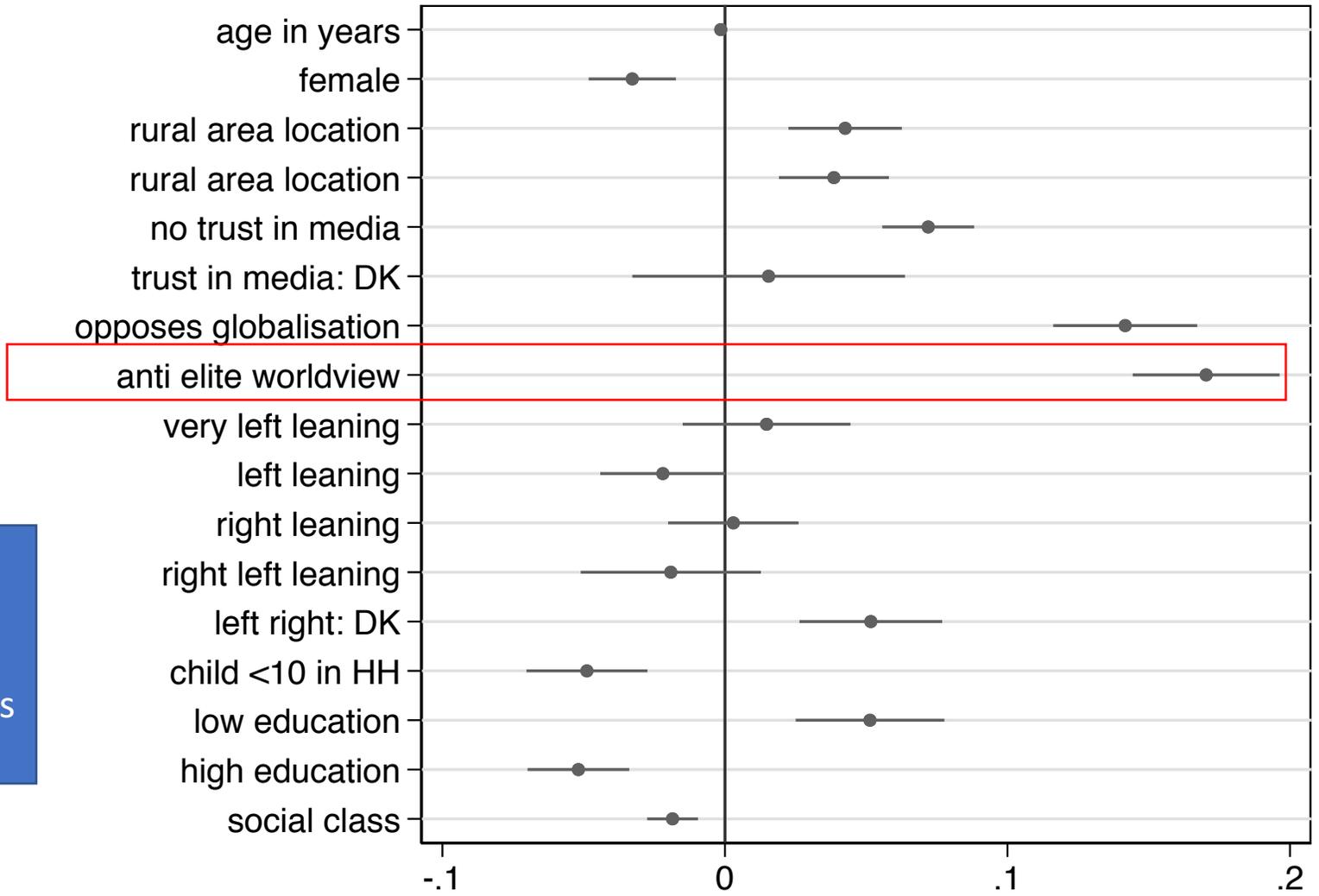
# Results

Anti elite world view

Hypothesis 1 confirmed

whether respondents find the rising success of parties concerning that protest against traditional political elites

## Marginal effect of each variable on vaccine hesitancy

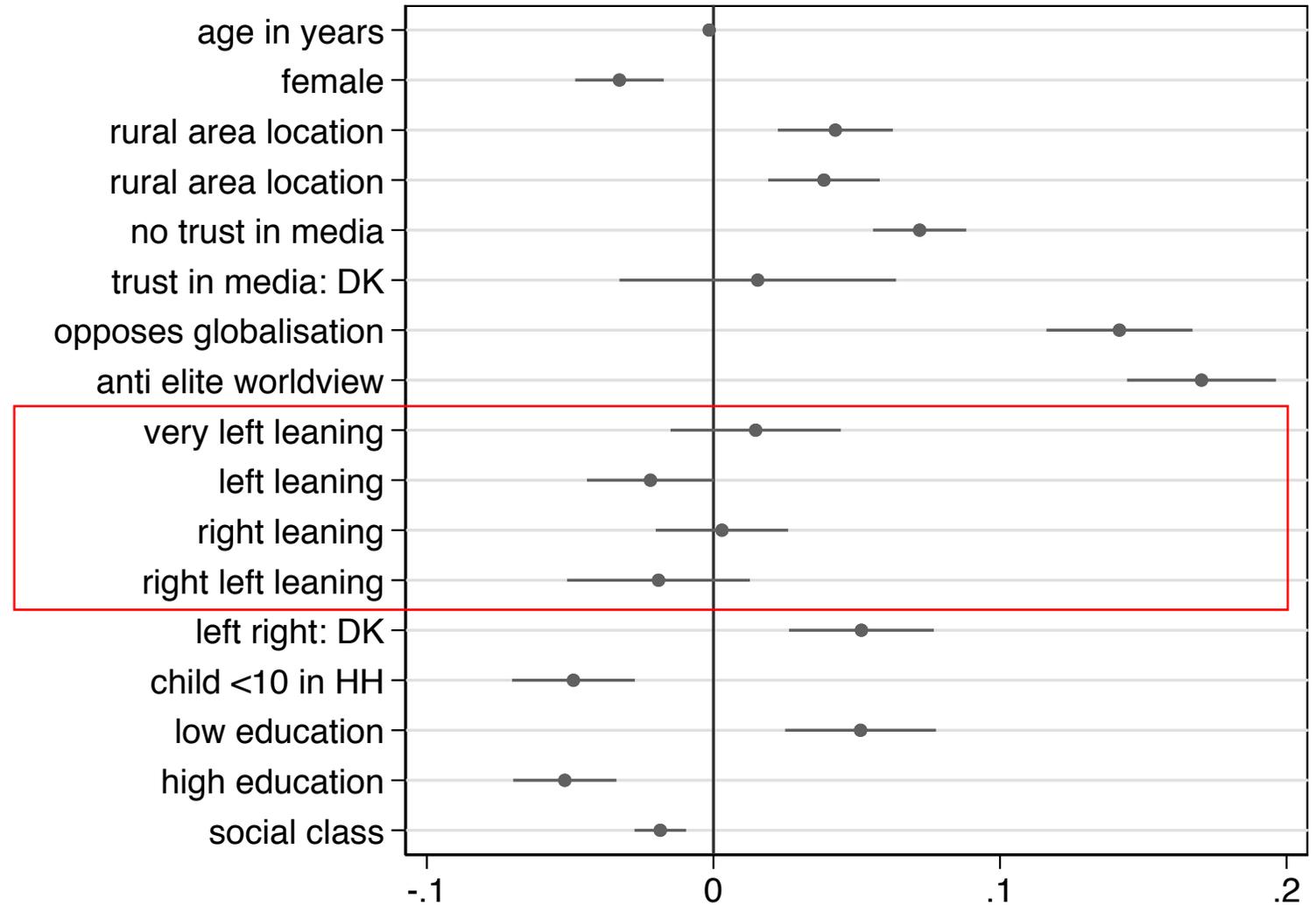


# Results

Political ideology

Left right ideology plays no role

## Marginal effect of each variable on vaccine hesitancy



# Results

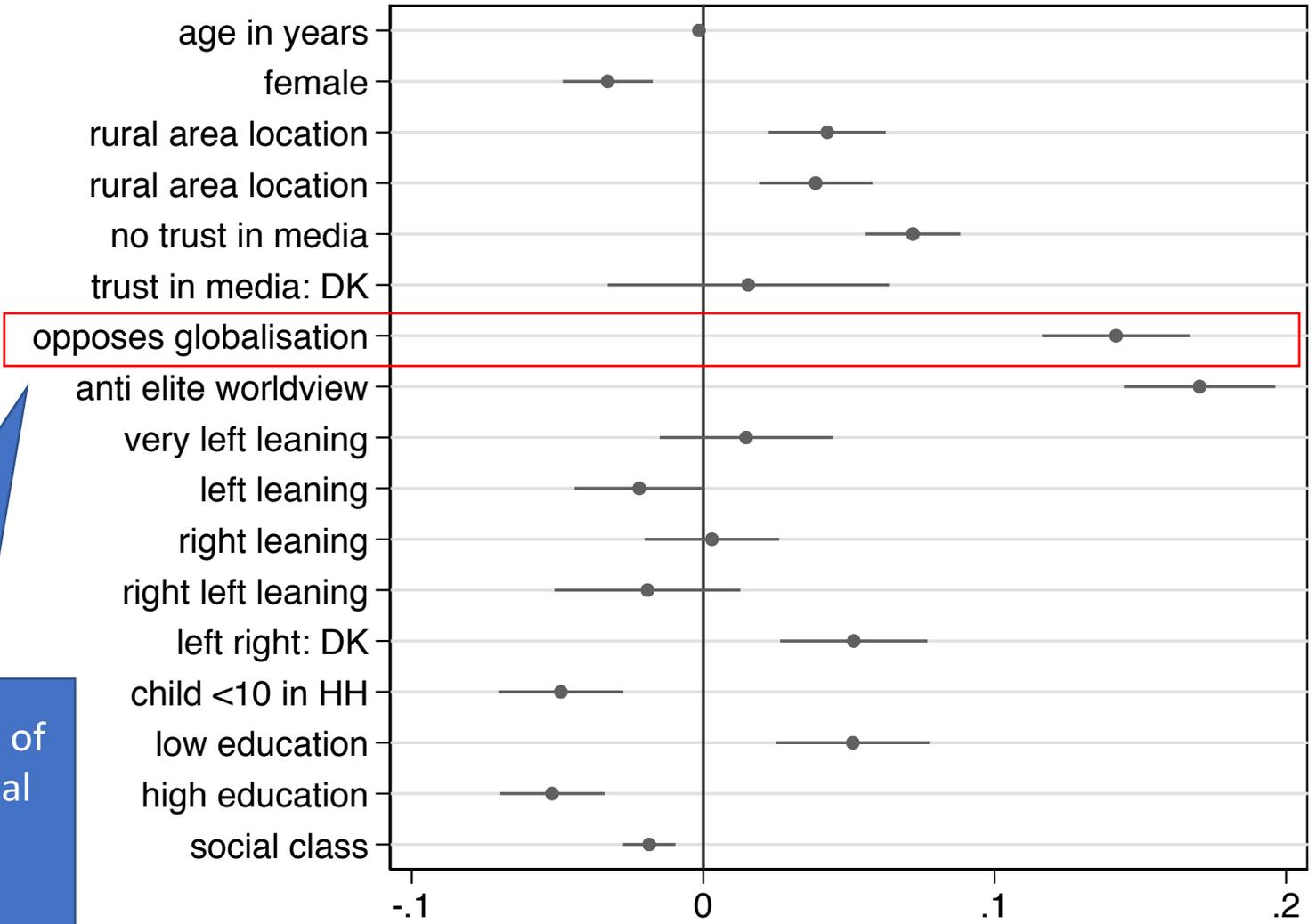
Political ideology

Cultural openness

hypothesis 2  
confirmed

Respondents find the effect of globalisation on the national identity of their country concerning

## Marginal effect of each variable on vaccine hesitancy



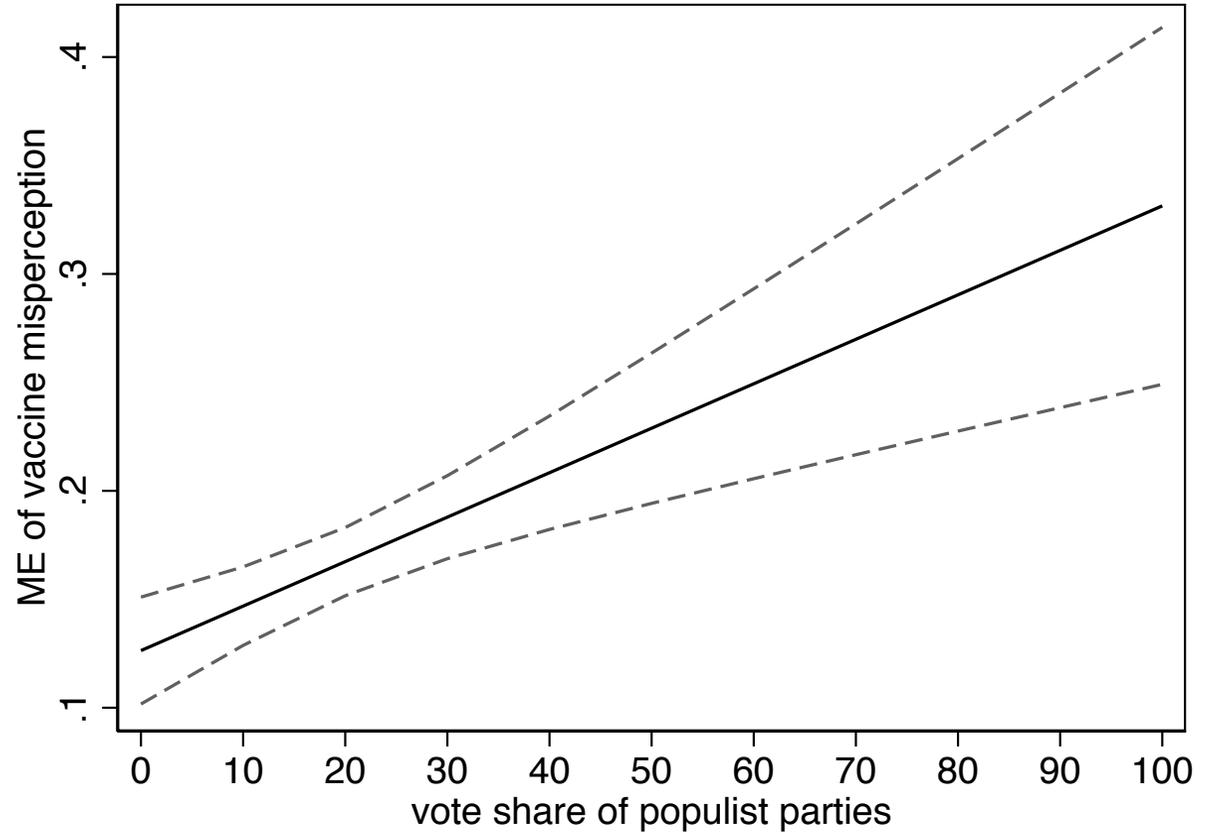
# Results

Vaccine related misperceptions increase vaccine hesitancy

This effect is stronger in countries where populists have a higher vote share

Hypothesis 4c: confirmed

Marginal effect of holding a misperception about vaccines by a country's vote share of populist parties



# Conclusion

Vaccine hesitancy is related to lower uptake: matters for behaviour

Vaccine hesitancy is related to political attitudes: this is important because it means hesitancy can less easily be changed, for instance by corrections of misperceptions

It is not left-right ideology that correlates with vaccine hesitancy; instead: an anti elite world view and culturally closed rather than open positions predict vaccine hesitancy

Context matters as well: health care system effort does not seem to matter (e.g. density of GPs) but the strength of populist parties

