

# Consumer acceptance and willingness-to-pay of sheep/goat products: Recommendations for marketing & segmentation with cross-country examples

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Innovation for Sustainable  
Sheep and Goat  
Production in Europe



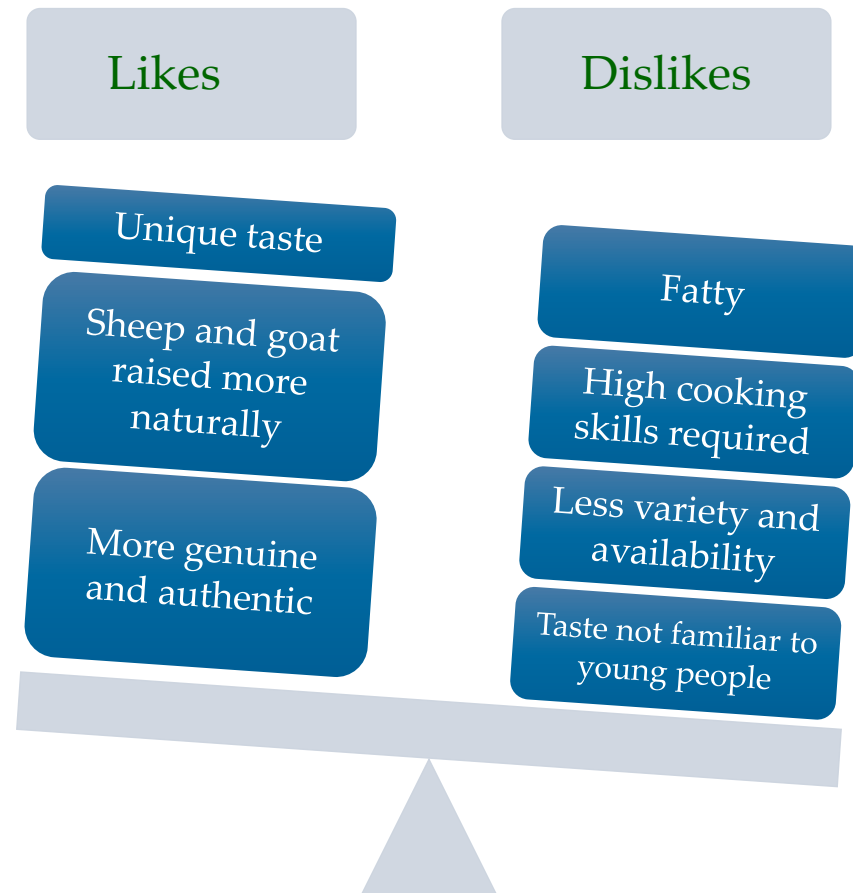
# Summary

- Qualitative reserach
- Quantitative research
  - WTP
  - Segmentation
- Recommendations for marketers



# Qualitative research

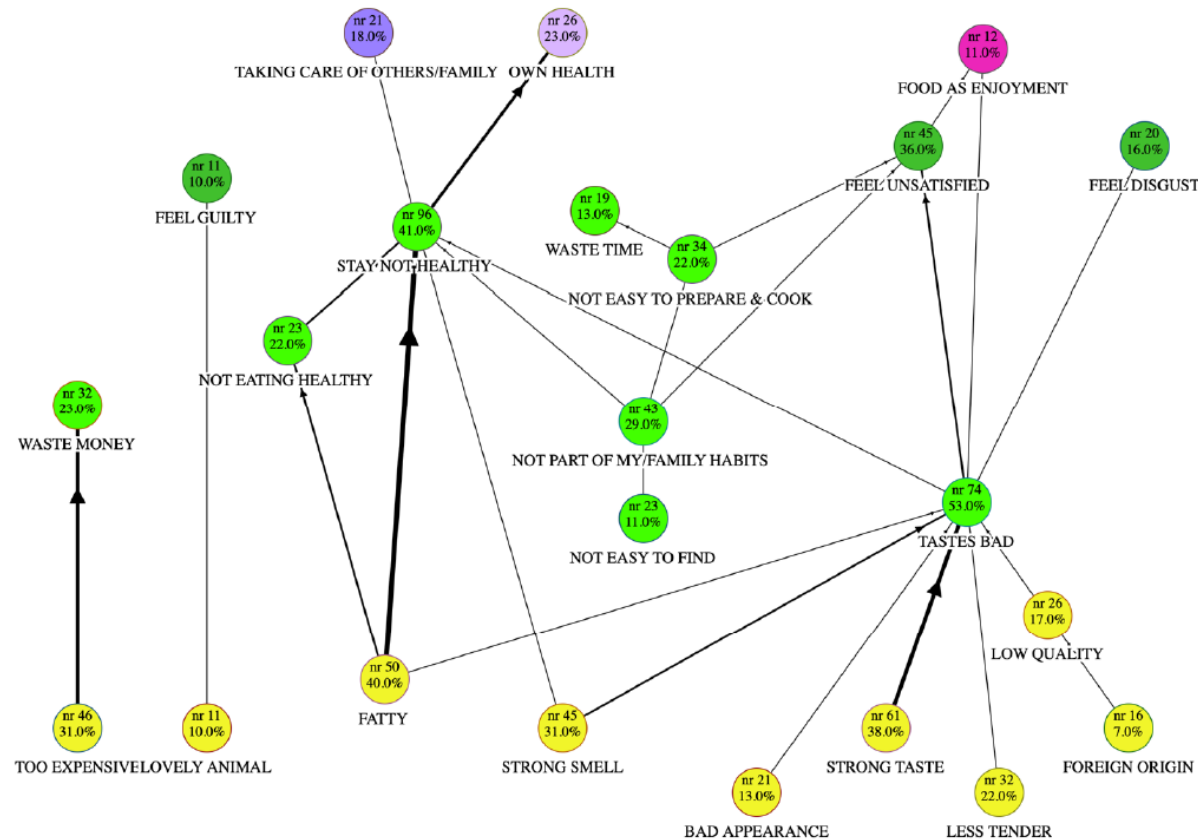
# Focus Group overall results: meat



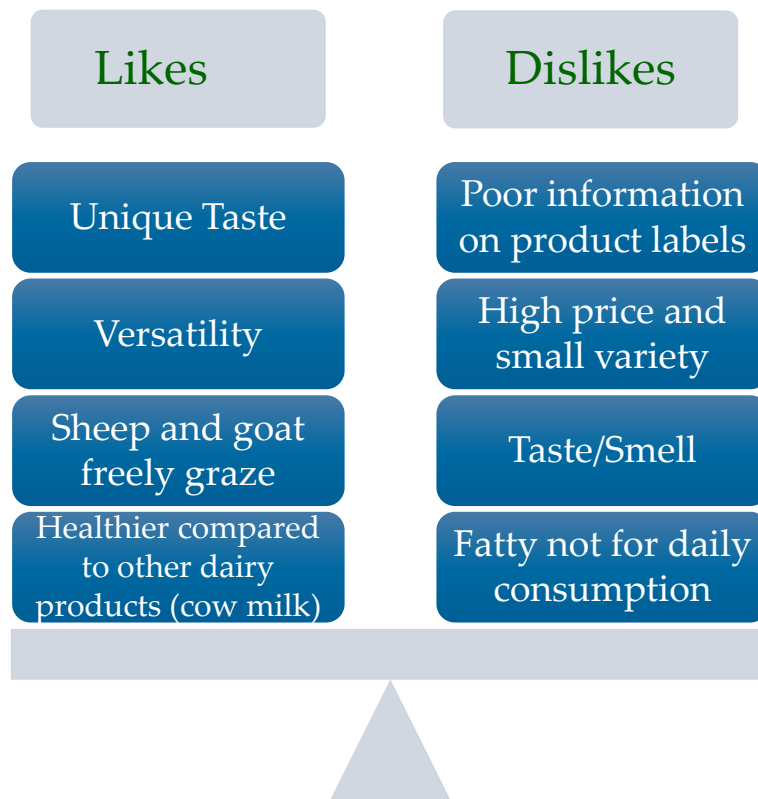
# Laddering results for meat



## Cognitive structure of barriers linked to the consumption of ewe/goat meat



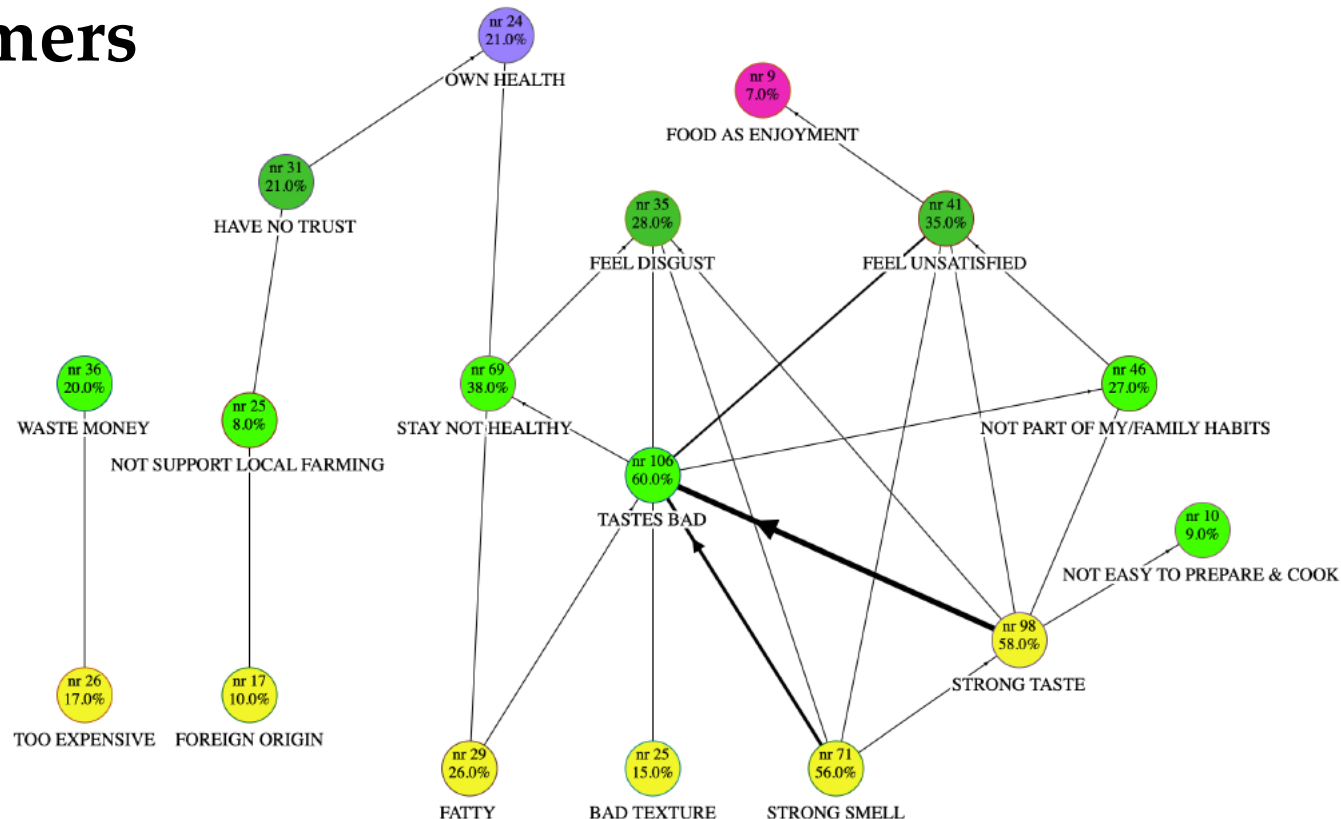
# Results summary - Dairy



# Laddering results for cheese



## Cognitive structure of barriers linked to the consumption of sheep/goat dairy products for non-consumers



# Quantitative research




























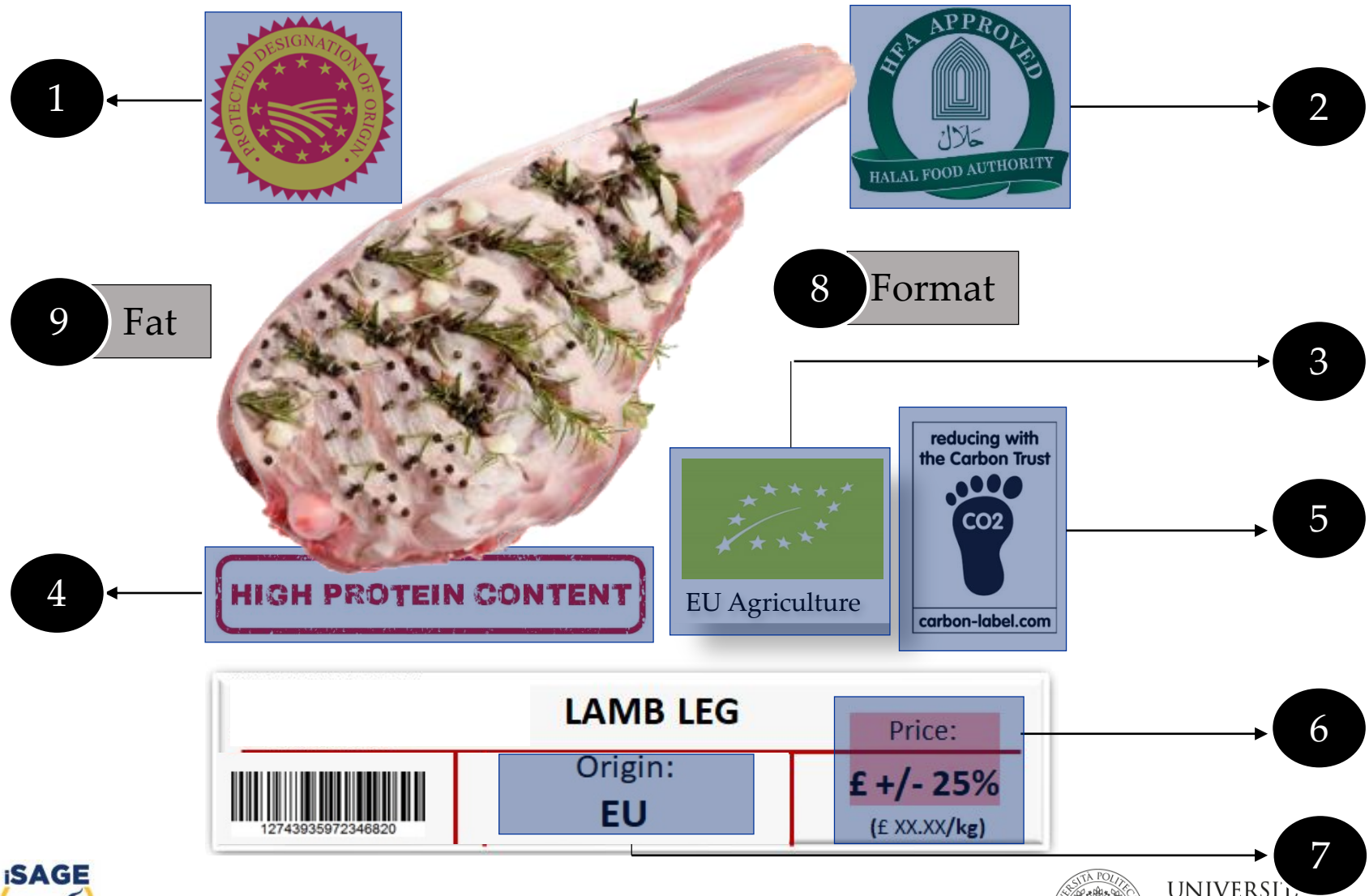
# Methods: choice experiment structure - MEAT

- Stated preferences, online survey
  - Cheap talk to reduce hypothetical bias (hypothetical WTP > actual WTP)
- 12 choice sets, 9 attributes
- Labeled: 5 alternatives
  - Lamb leg, lamb chops, goat chops, Beef T-bone
  - A no-choice alternative
- 410 regular meat consumers per country:
  - ES, FI, FR, GR, IT, TR, UK
  - Consumption of lamb/goat meat at least once per year

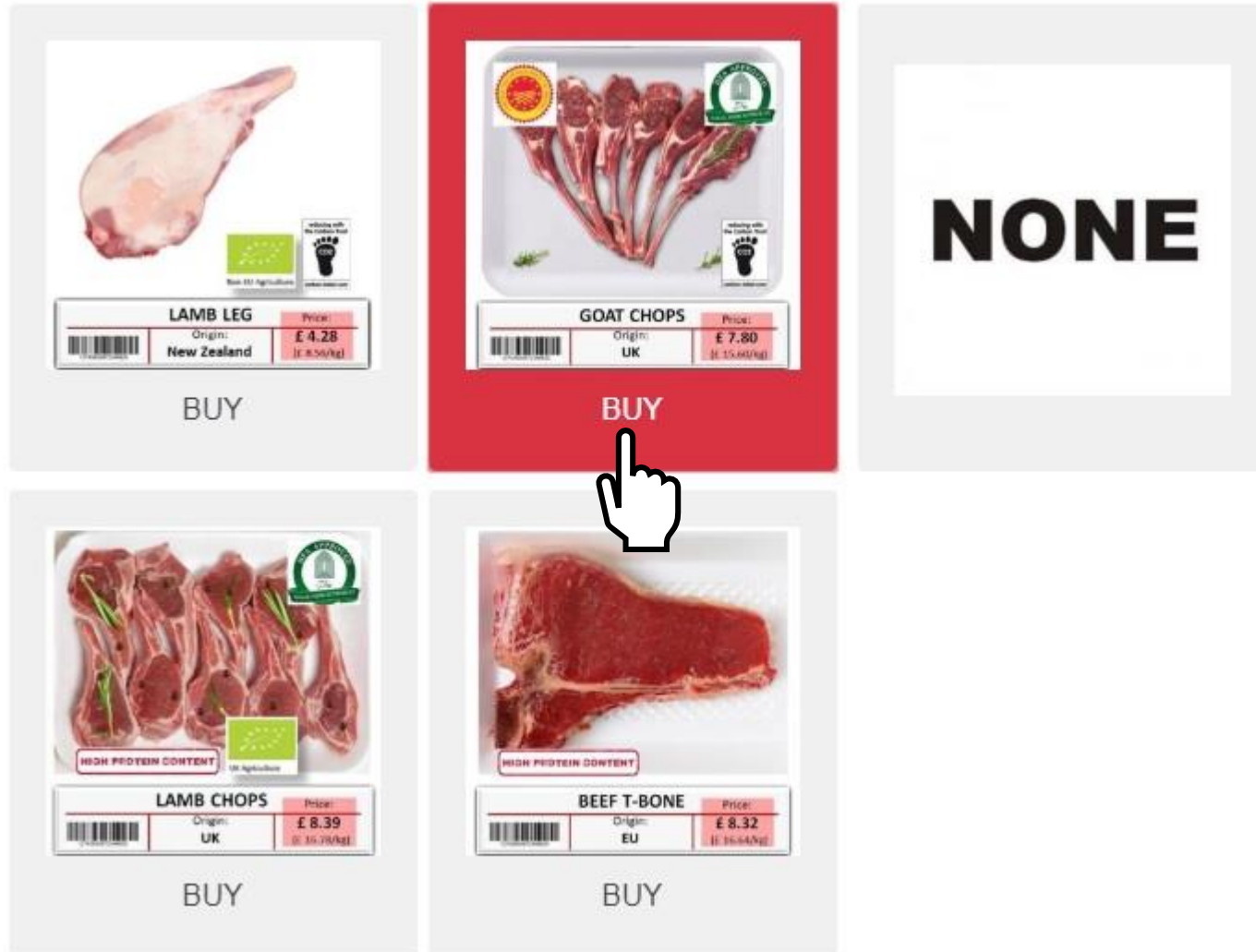
# Choice experiment design for meat

Attributes	Lamb leg	Lamb chops	Goat chops	Beef T-bone
Price	<ul style="list-style-type: none"> <li>•Average price</li> <li>•-30%</li> <li>•+30%</li> </ul>	<ul style="list-style-type: none"> <li>•Average price</li> <li>•-30%</li> <li>•+30%</li> </ul>	<ul style="list-style-type: none"> <li>•Average price</li> <li>•-30%</li> <li>•+30%</li> </ul>	<ul style="list-style-type: none"> <li>•Average price</li> <li>•-30%</li> <li>•+30%</li> </ul>
Origin	<ul style="list-style-type: none"> <li>•National</li> <li>•EU</li> <li>•Out of EU</li> </ul>	<ul style="list-style-type: none"> <li>•National</li> <li>•EU</li> <li>•Out of EU</li> </ul>	<ul style="list-style-type: none"> <li>•National</li> <li>•EU</li> <li>•Out of EU</li> </ul>	<ul style="list-style-type: none"> <li>•National</li> <li>•EU</li> <li>•Out of EU</li> </ul>
PGI/PDO				
Low carbon footprint				
Organic				
Fat content			-	
Protein content	HIGH PROTEIN CONTENT	HIGH PROTEIN CONTENT	HIGH PROTEIN CONTENT	HIGH PROTEIN CONTENT
Halal				
Format				

# Choice experiment attributes



# Choice experiment for meat



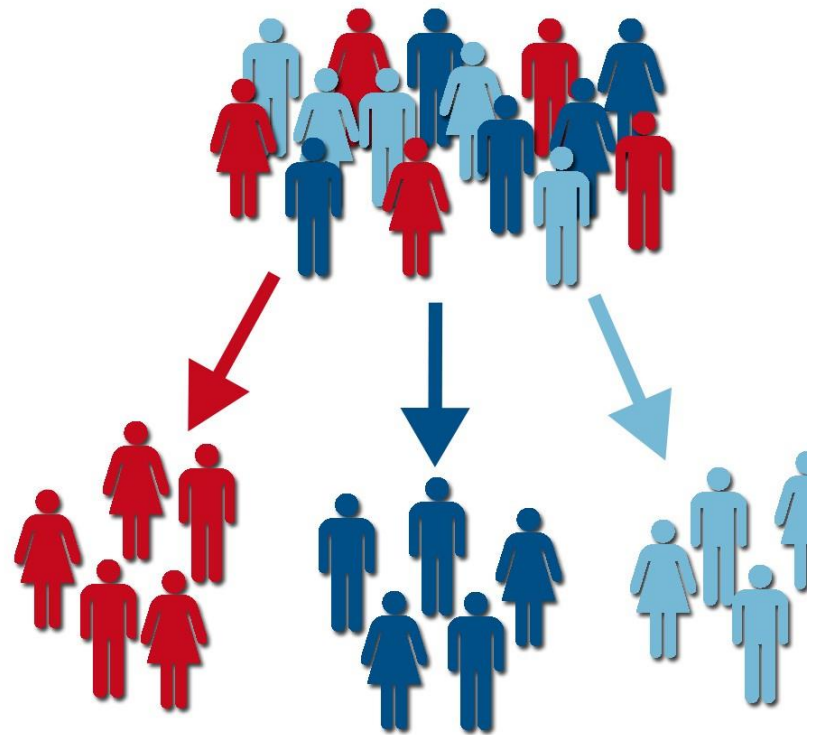
# Choice experiment for meat





# Consumers are not all alike

- Consumers have heterogeneous preferences depending from status, culture, income, education, family & household characteristics, past experience, etc.
- They search for different **benefits**, and have different views of risks
- Market segmentation is necessary







# Results for meat



# Results: meat cuts and type

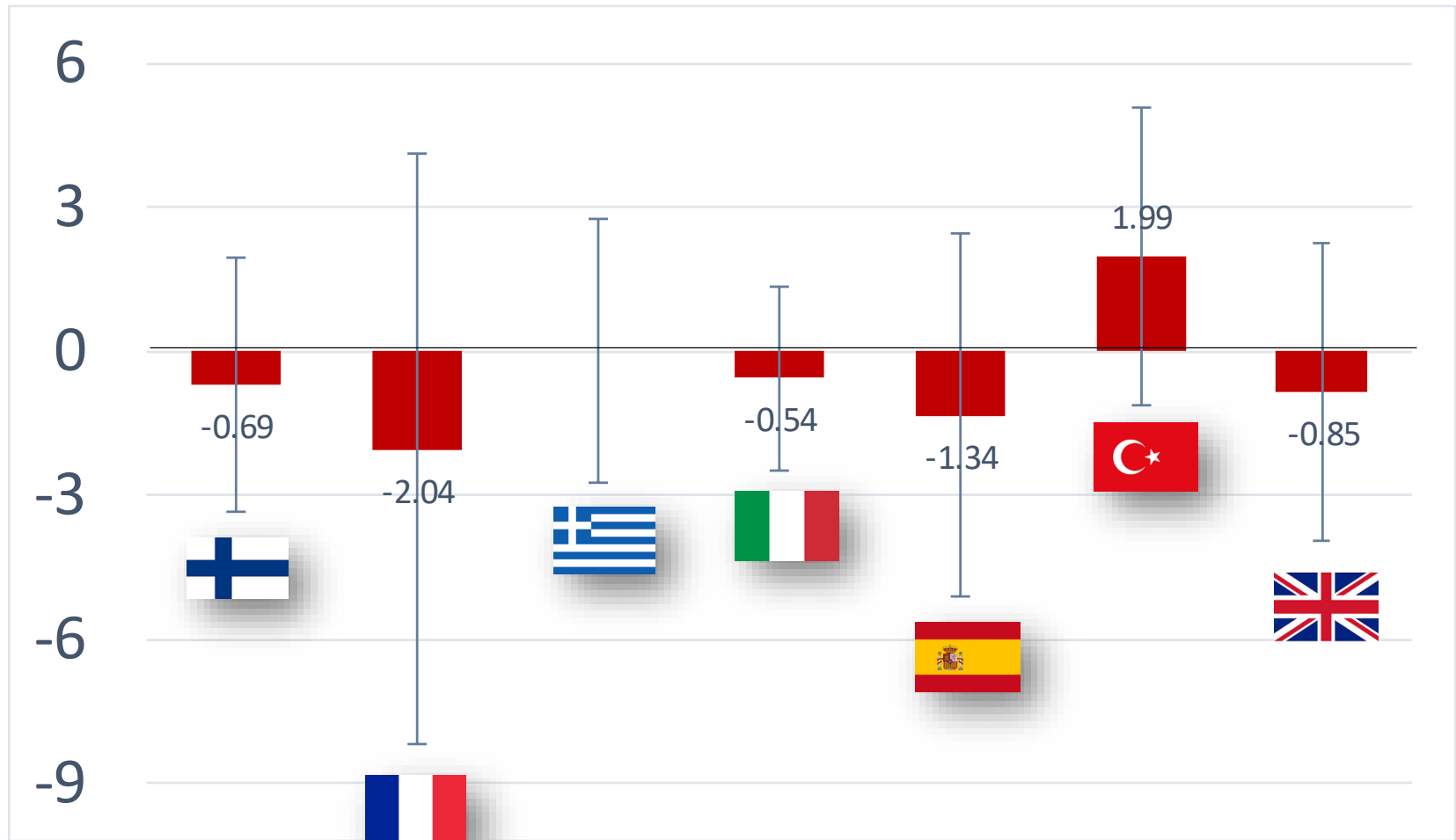
\*Beef is the reference category

Meat	Finland	France	Greece	Italy	Spain	Turkey	UK
 Beef T-bone	-	-	-	-	-	-	-
 Lamb leg	↓	↑↑	↓	↓	↓	↓	↑↑
 Lamb chops	↓	↑	↓	↑	↑	↑	↑↑
 Goat chops	↓↓	↓↓	↓	↓↓	↓↓	↓	↓
None	↓	↑	↓	↓↓	↓↓	↓↓	↑

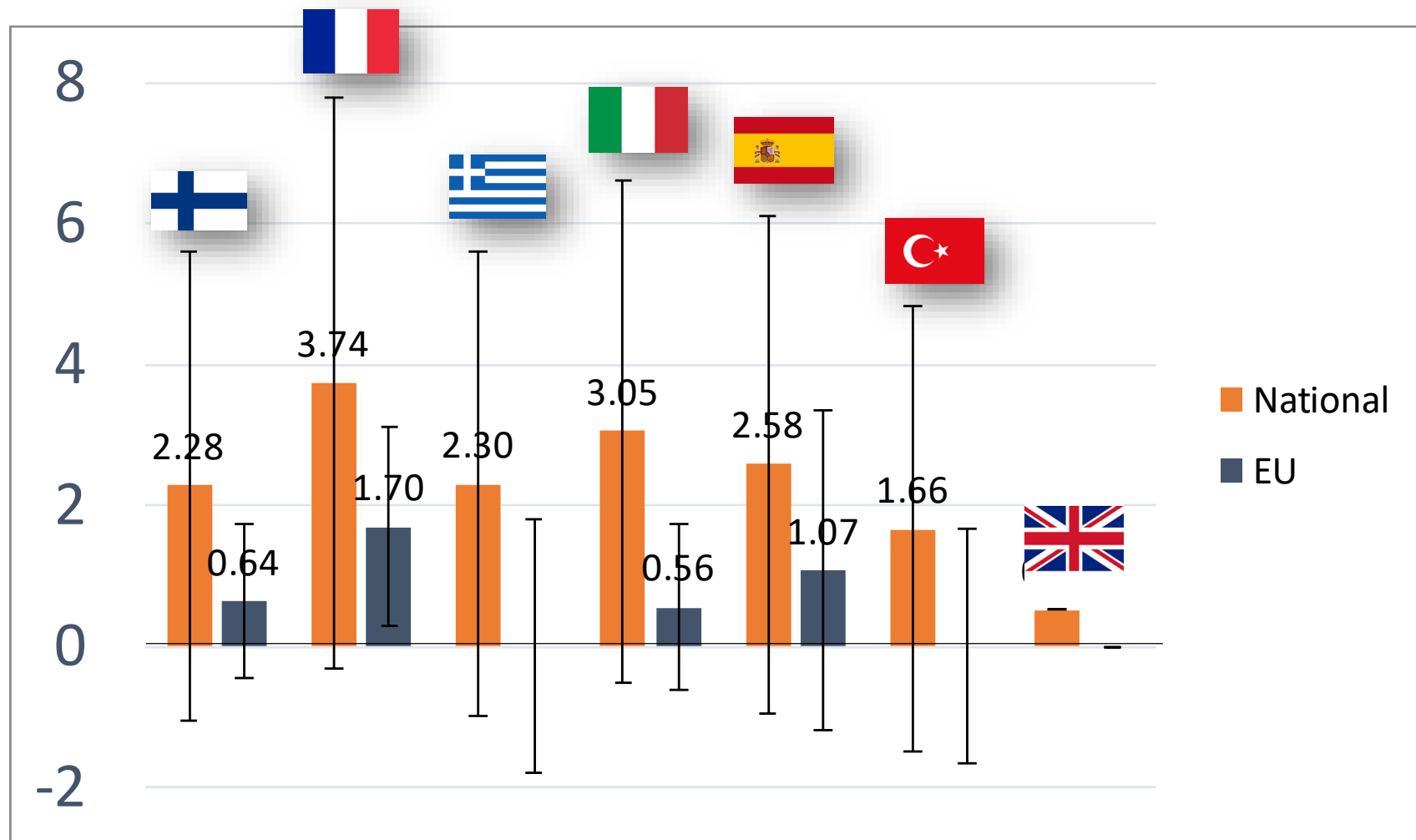
5% significance level



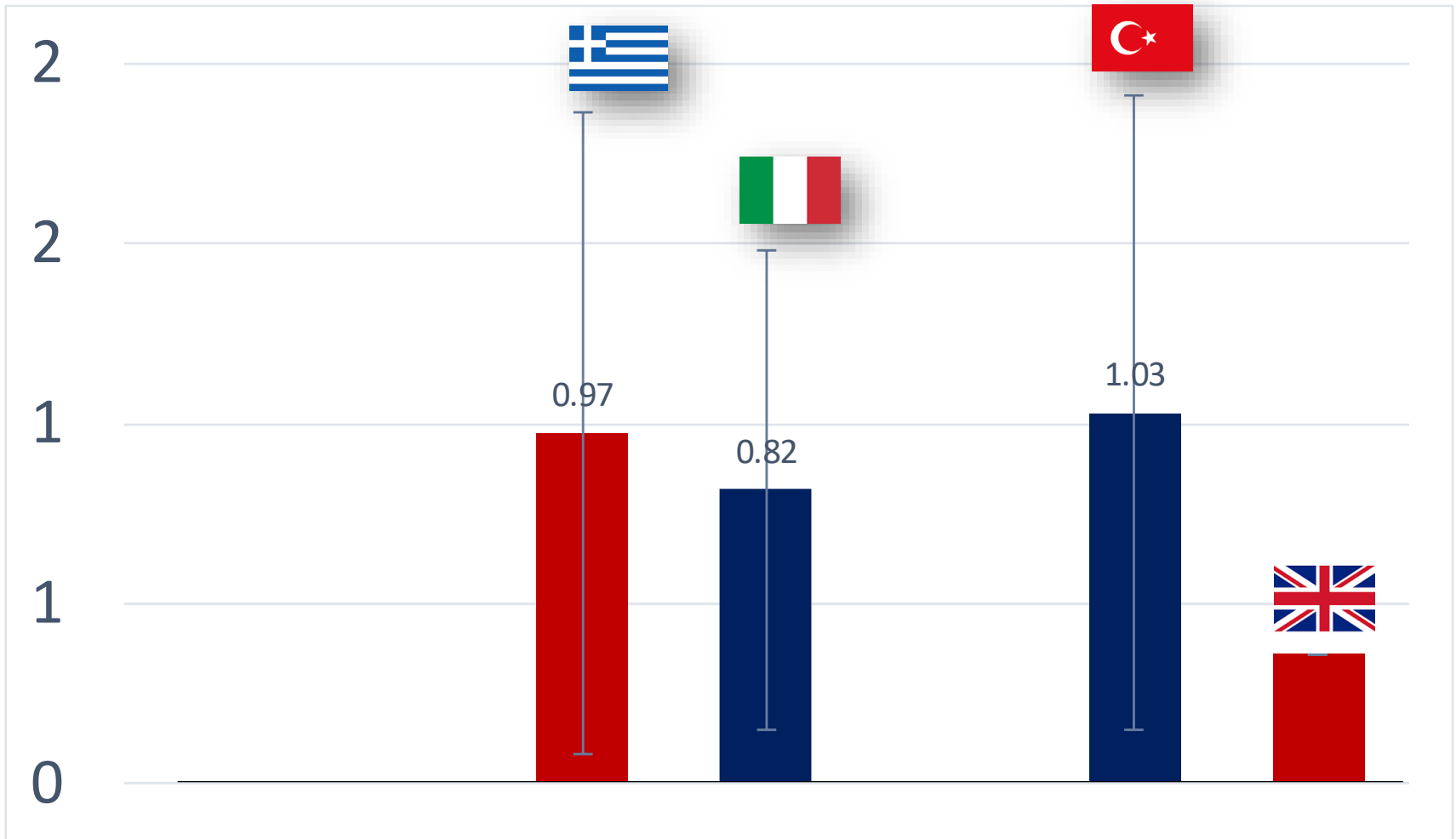
# Average WTP (€) for Halal meat



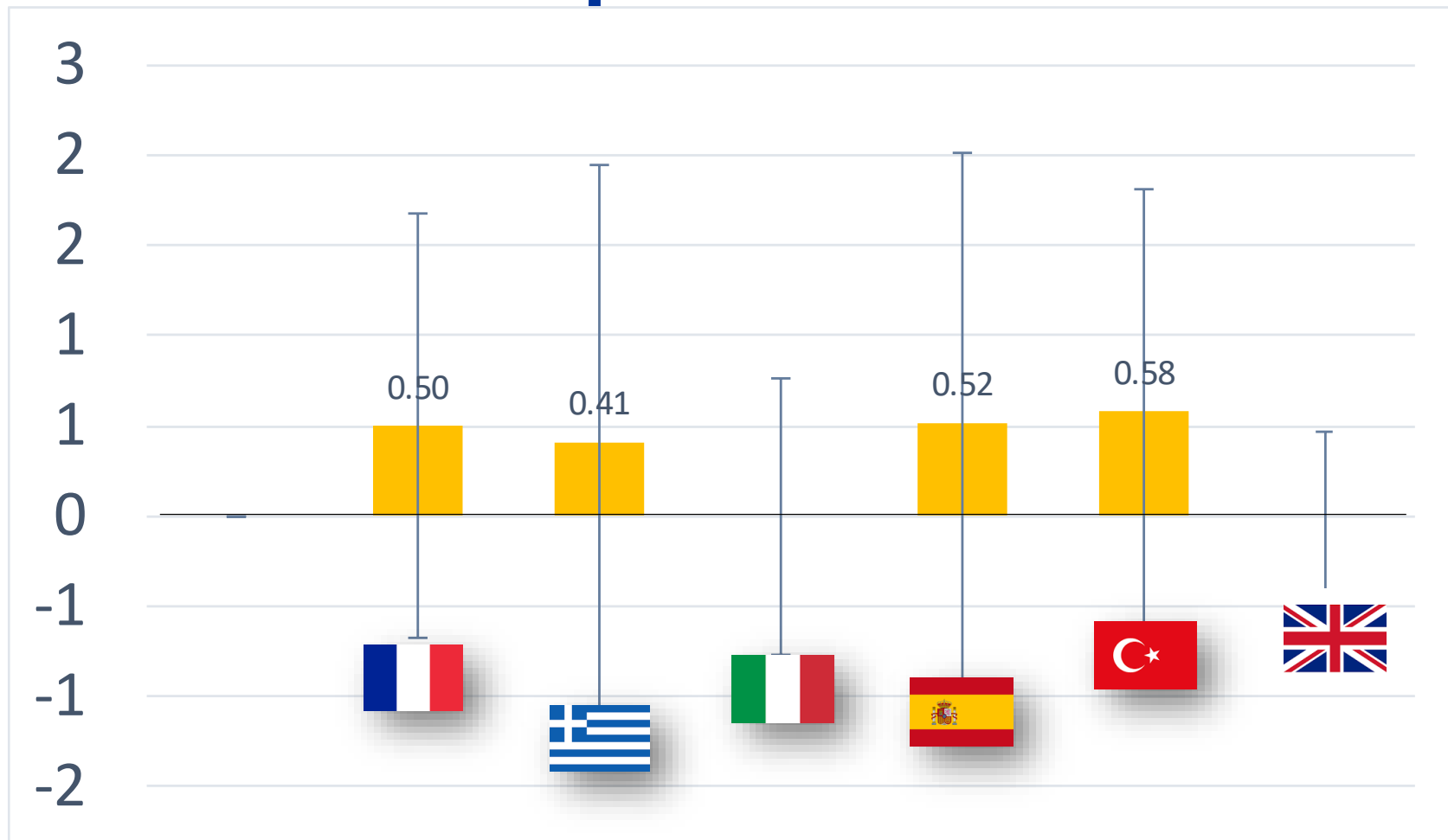
# Average WTP (€) for meat origin



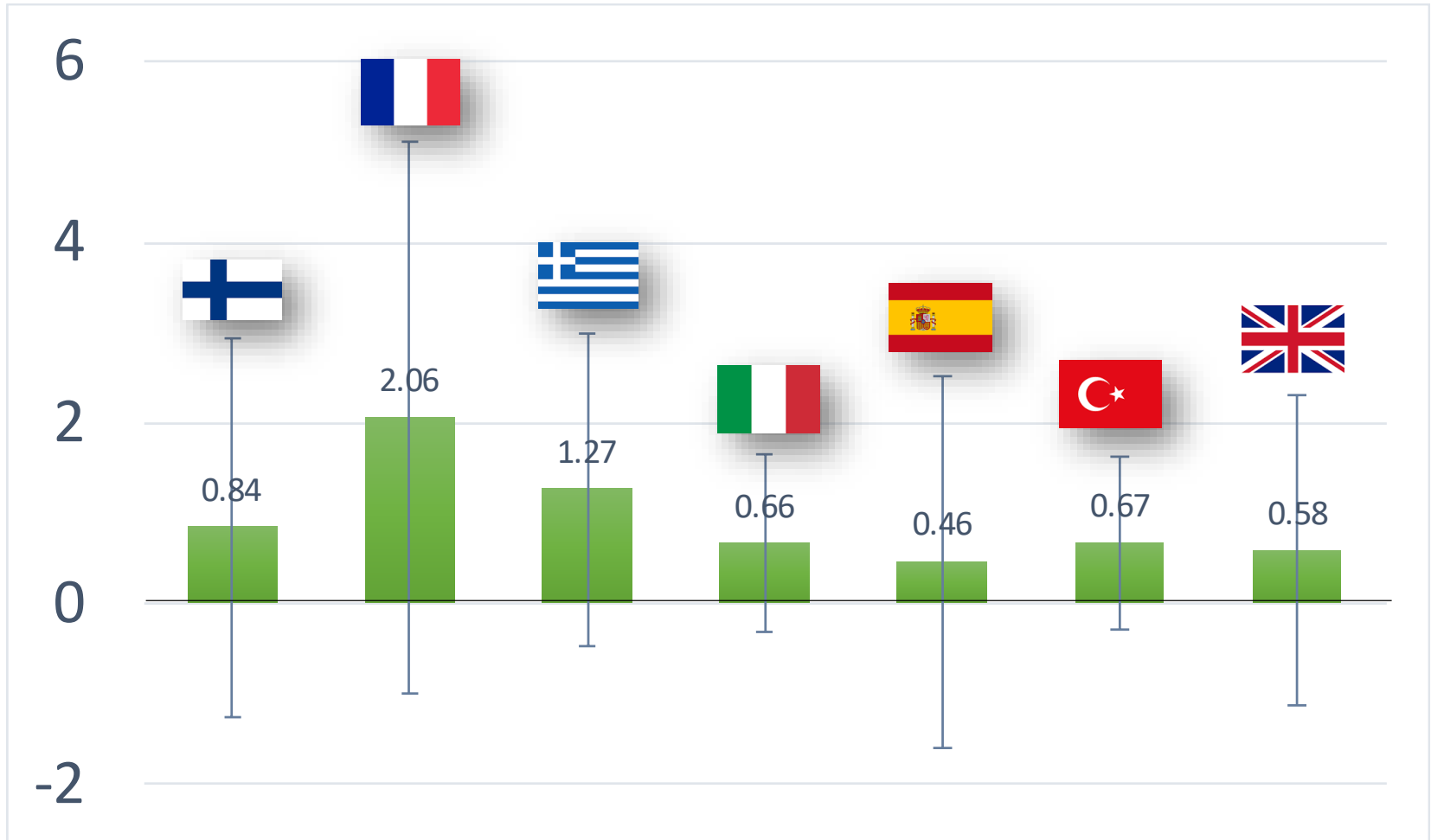
# Average WTP (€) for PGI/PDO



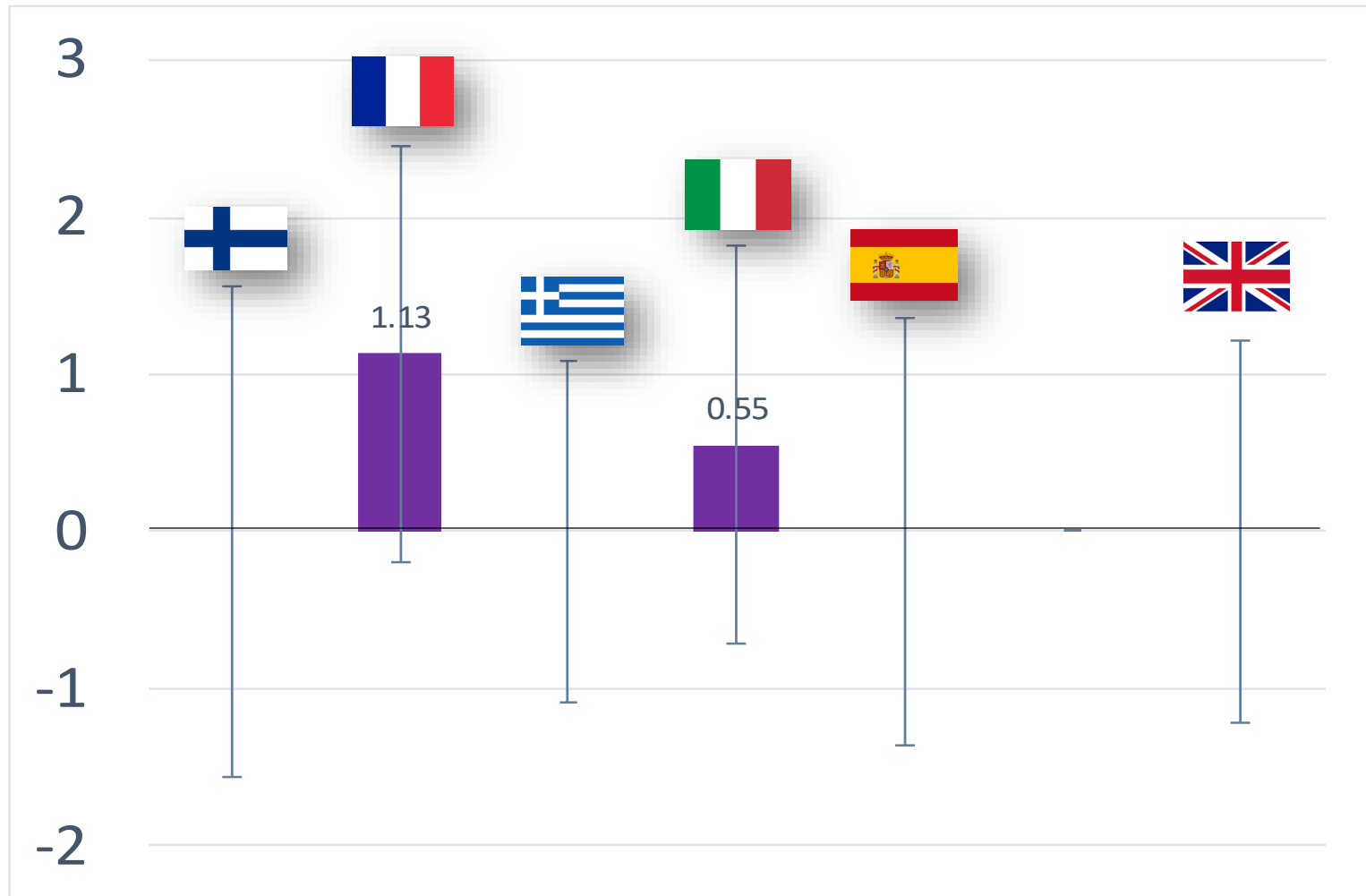
# Average WTP (€) for carbon footprint label



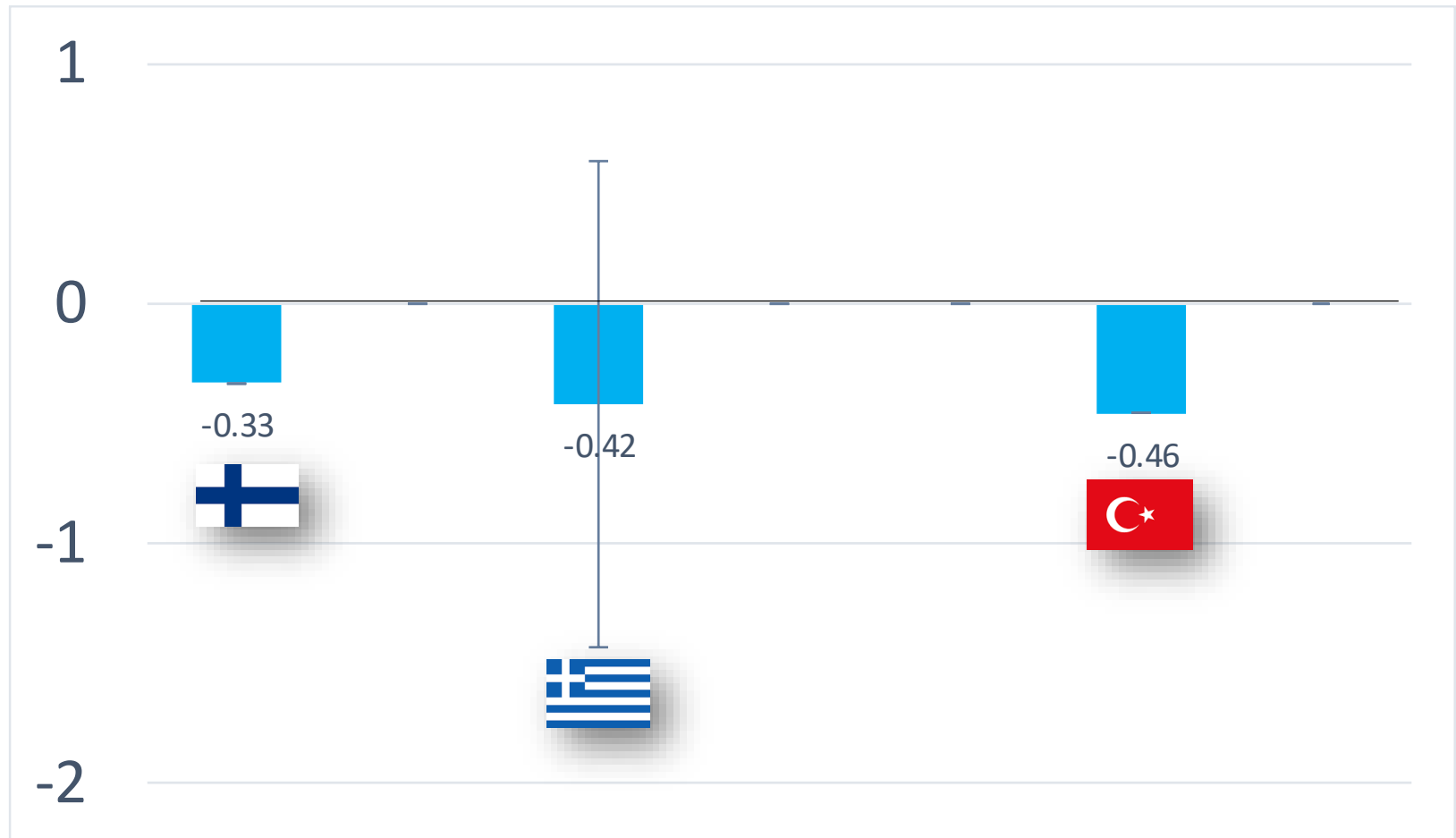
# Average WTP (€) for organic label



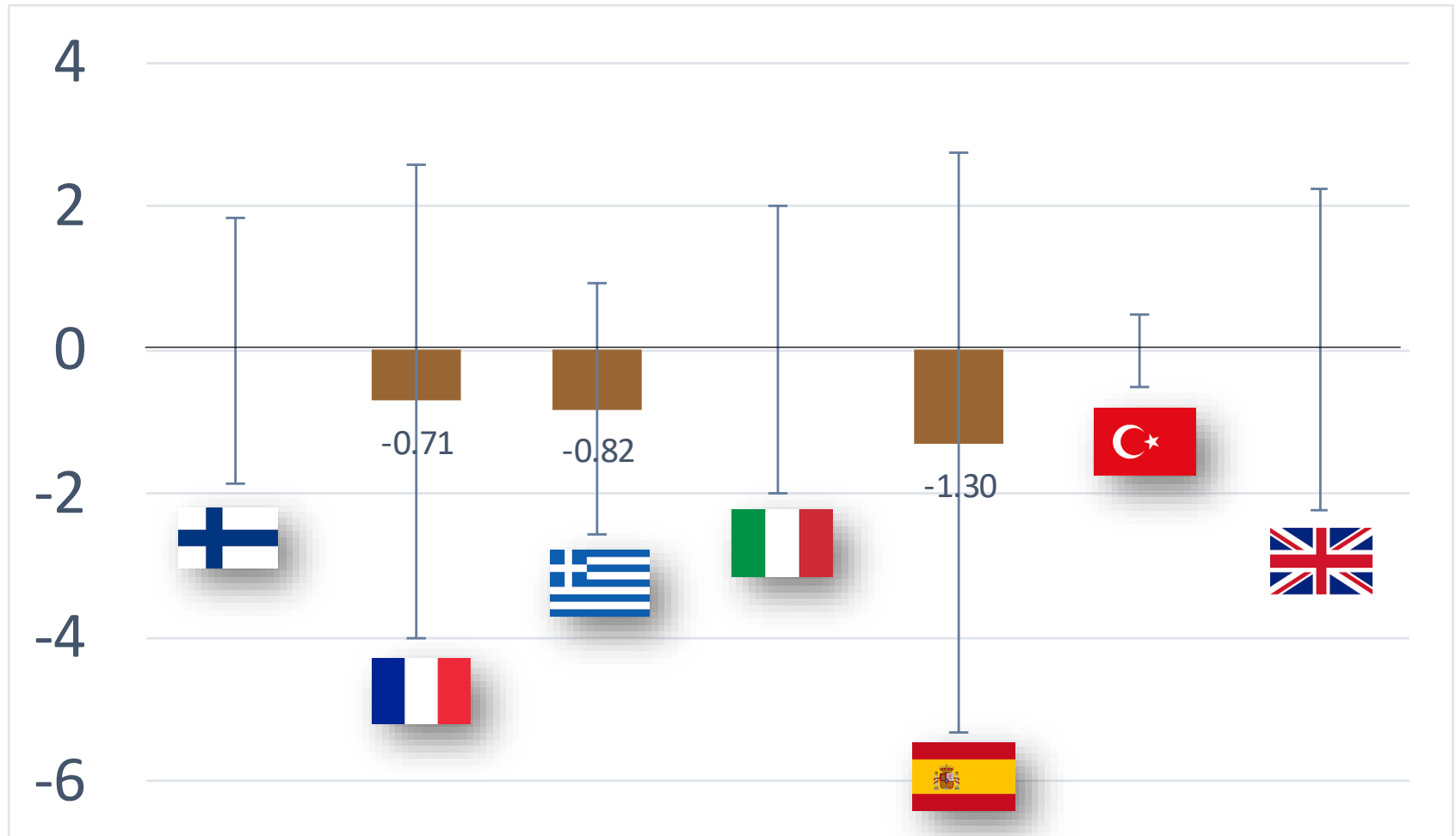
# Average WTP (€) for lean meat



# Average WTP (€) for high protein content



# Average WTP (€) for ready to cook meat





# Cross-country comparison Meat segments

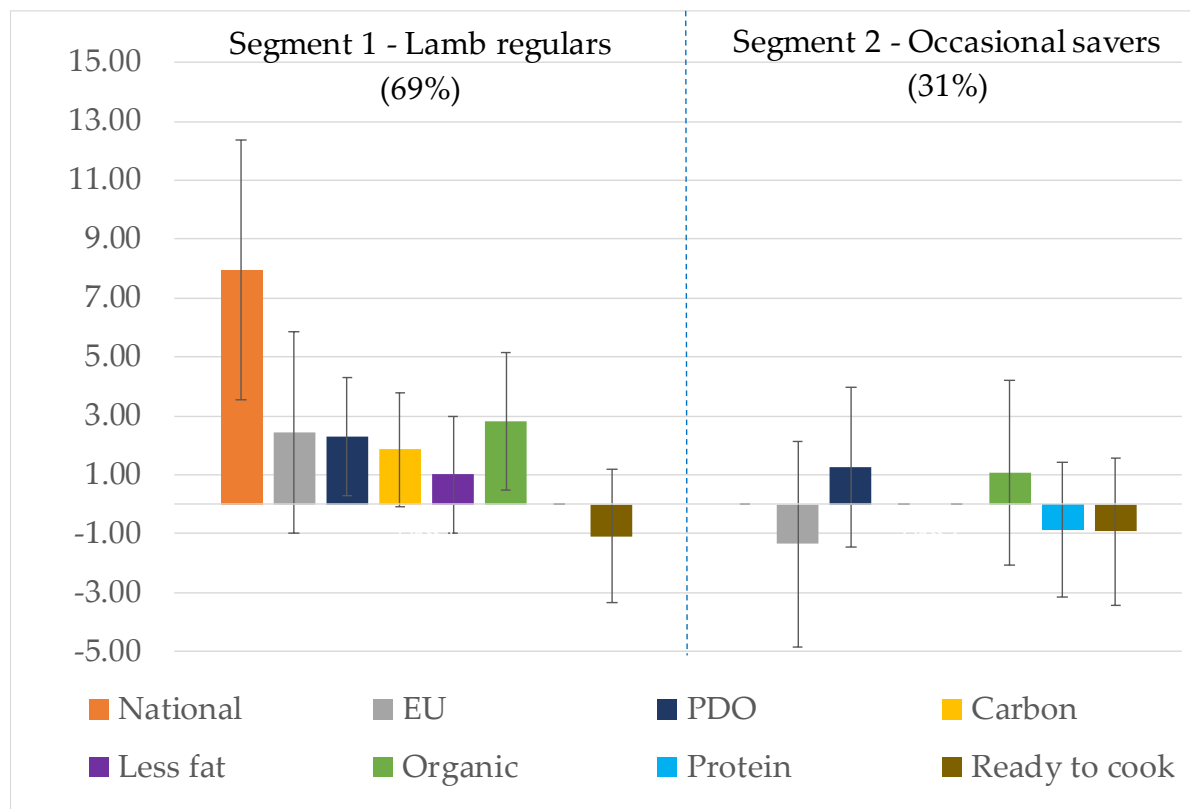


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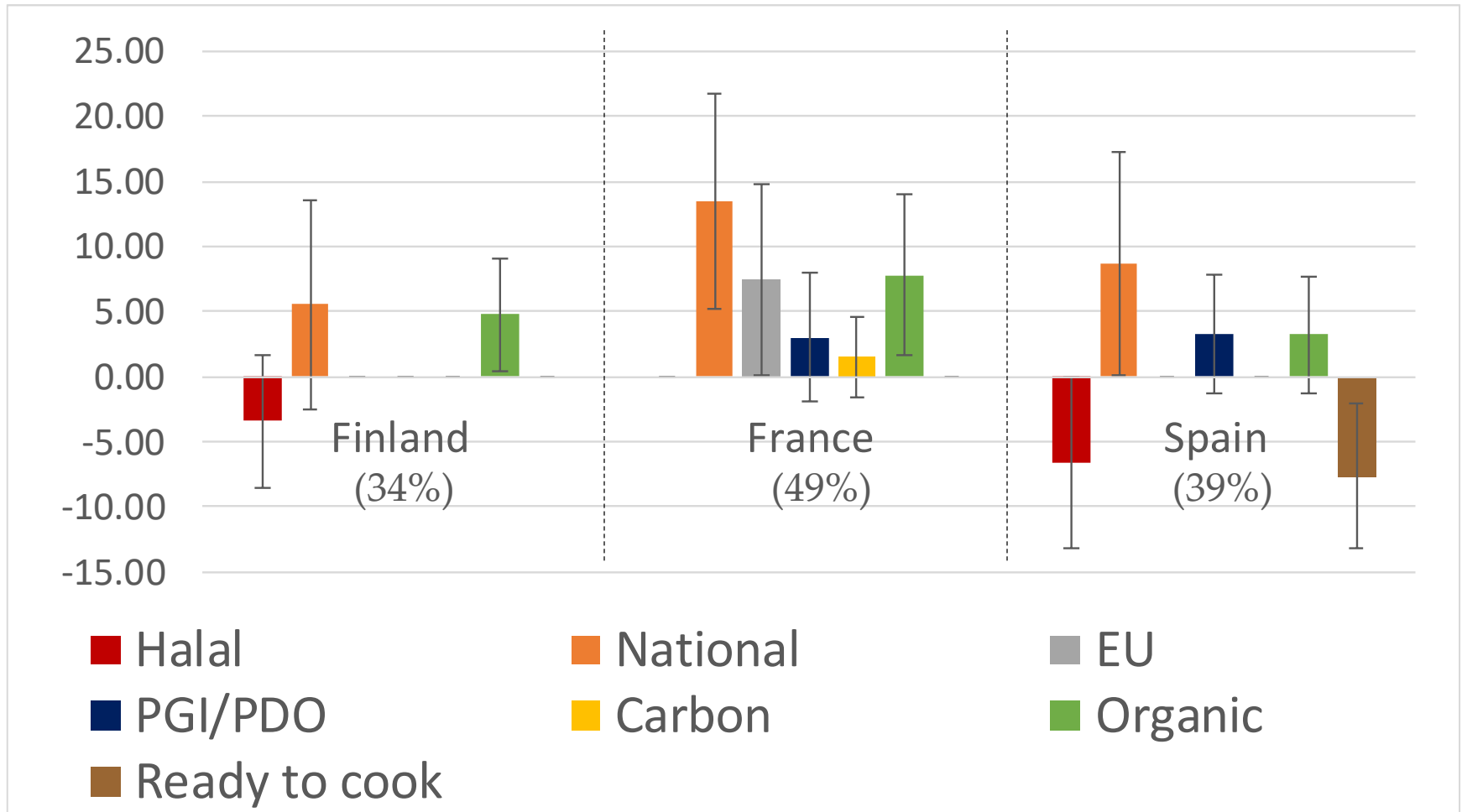
# GR Meat segments (WTP €)



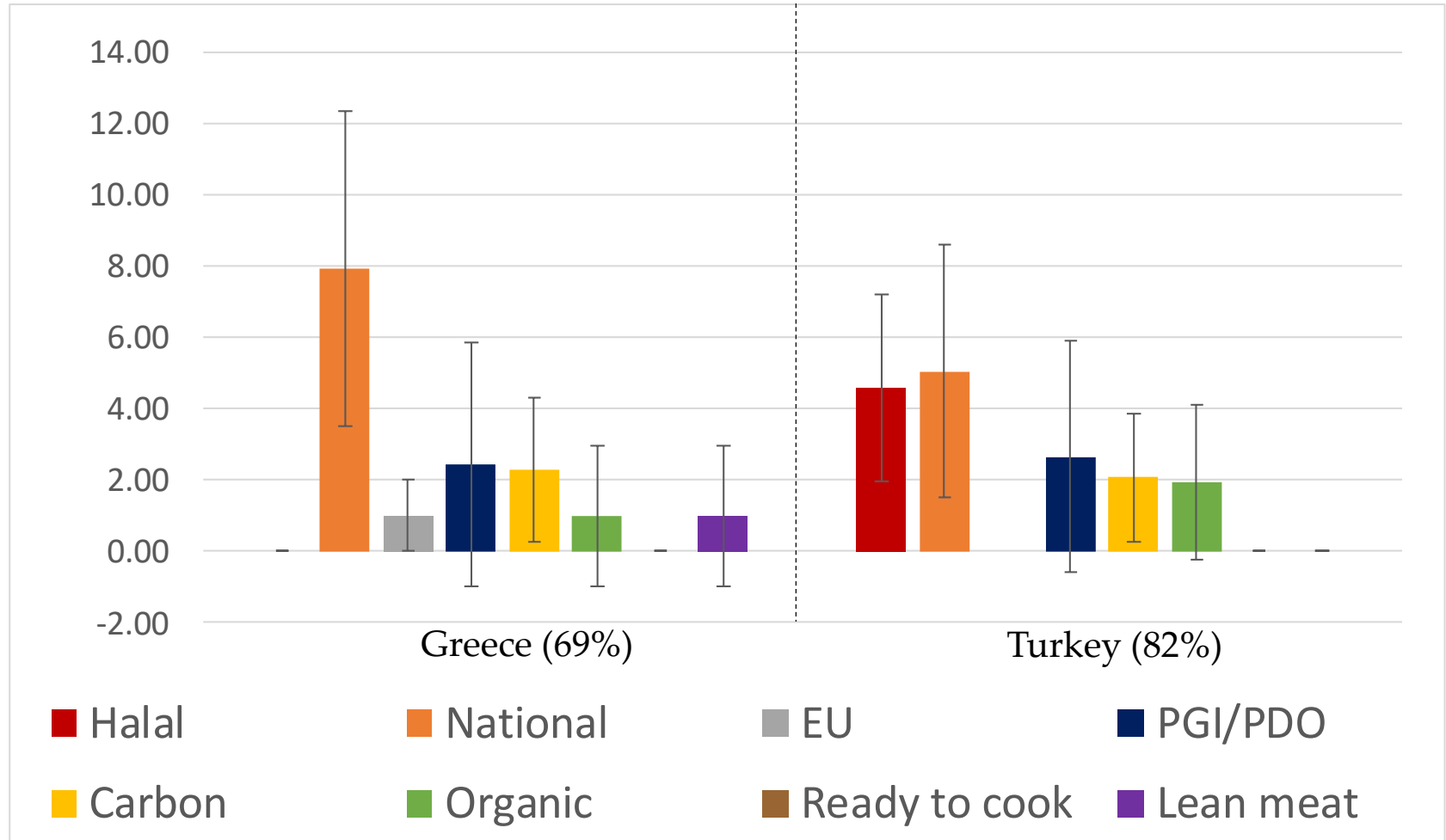
# GR Meat segments

	Sociodemographic	Behavior	Knowledge	Psychographics	Main attributes
<b>Segment 1 - Lamb regulars (69%)</b>	Male, 35-44 years old, employed, higher education and larger households	Regular lamb consumers, especially on weekends. Stable consumption in the last 3 years.	High knowledge about lamb meat.	Likes novelty, follows an unhealthy lifestyle and has no interest in convenience	National or EU origin, organic, PDO, Carbon footprint, less fatty
<b>Segment 2 - Occasional savers (31%)</b>	Female, 55-64 years old, unemployed or retired, no kids, smaller households.	Stable/decreasing consumptions of lamb in the last 3 years. Mainly eaten in religious holidays	Low knowledge about lamb meat.	Do not like novelty, prefers convenience and has a healthy lifestyle.	Price sensitive, PDO, Organic, non-EU origin and no high protein content

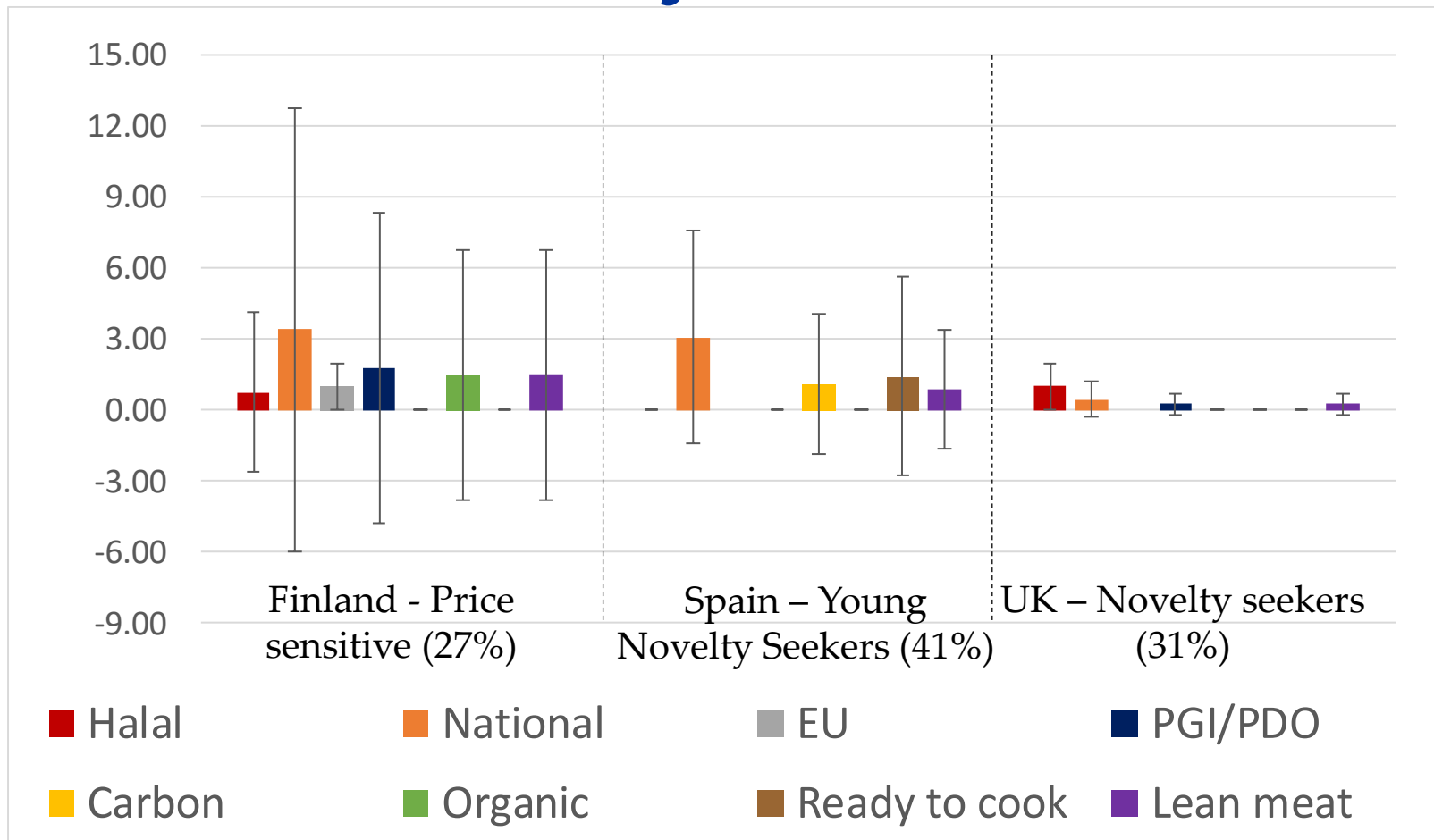
# Premium meat consumers



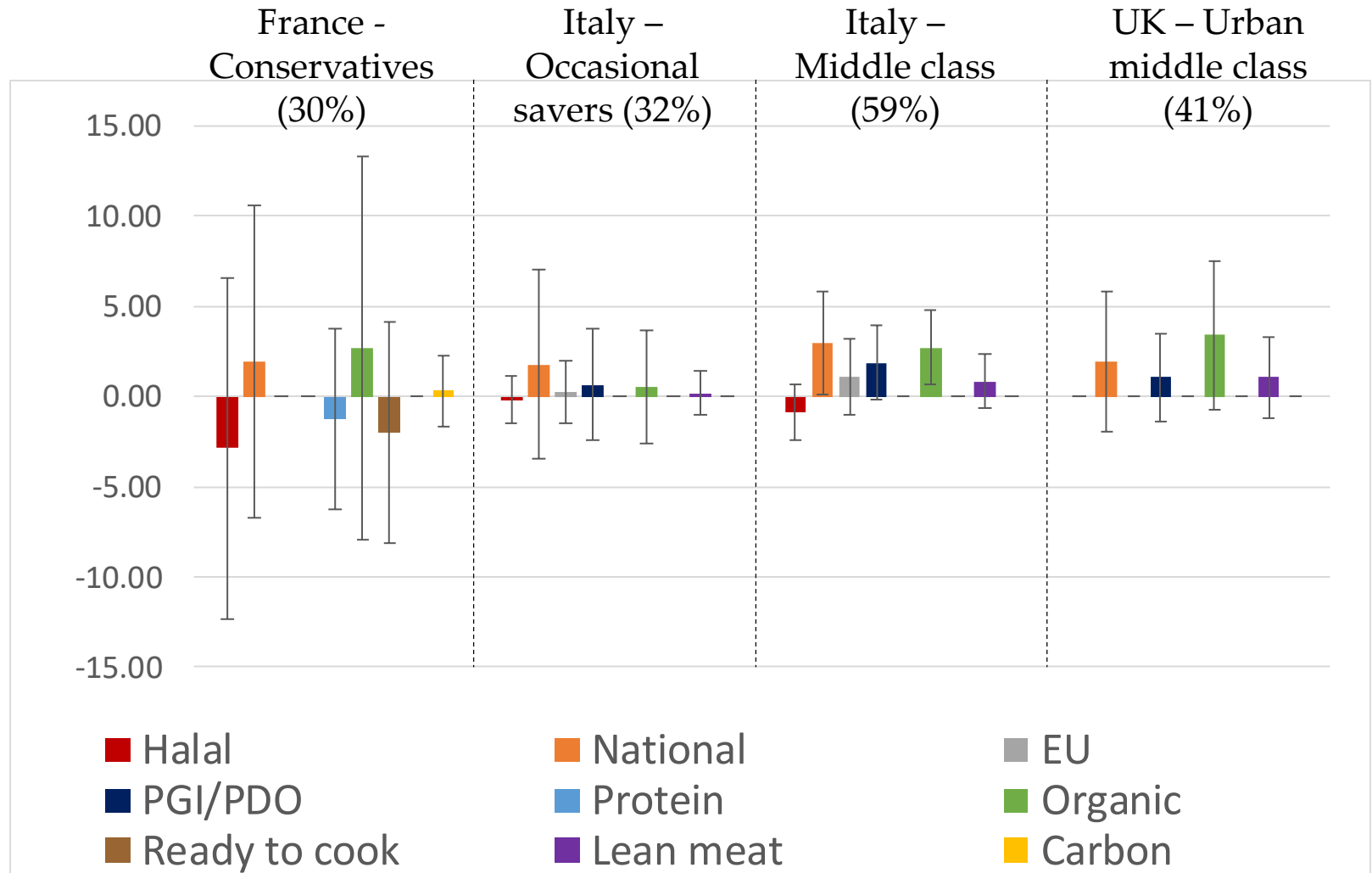
# Lamb regulars



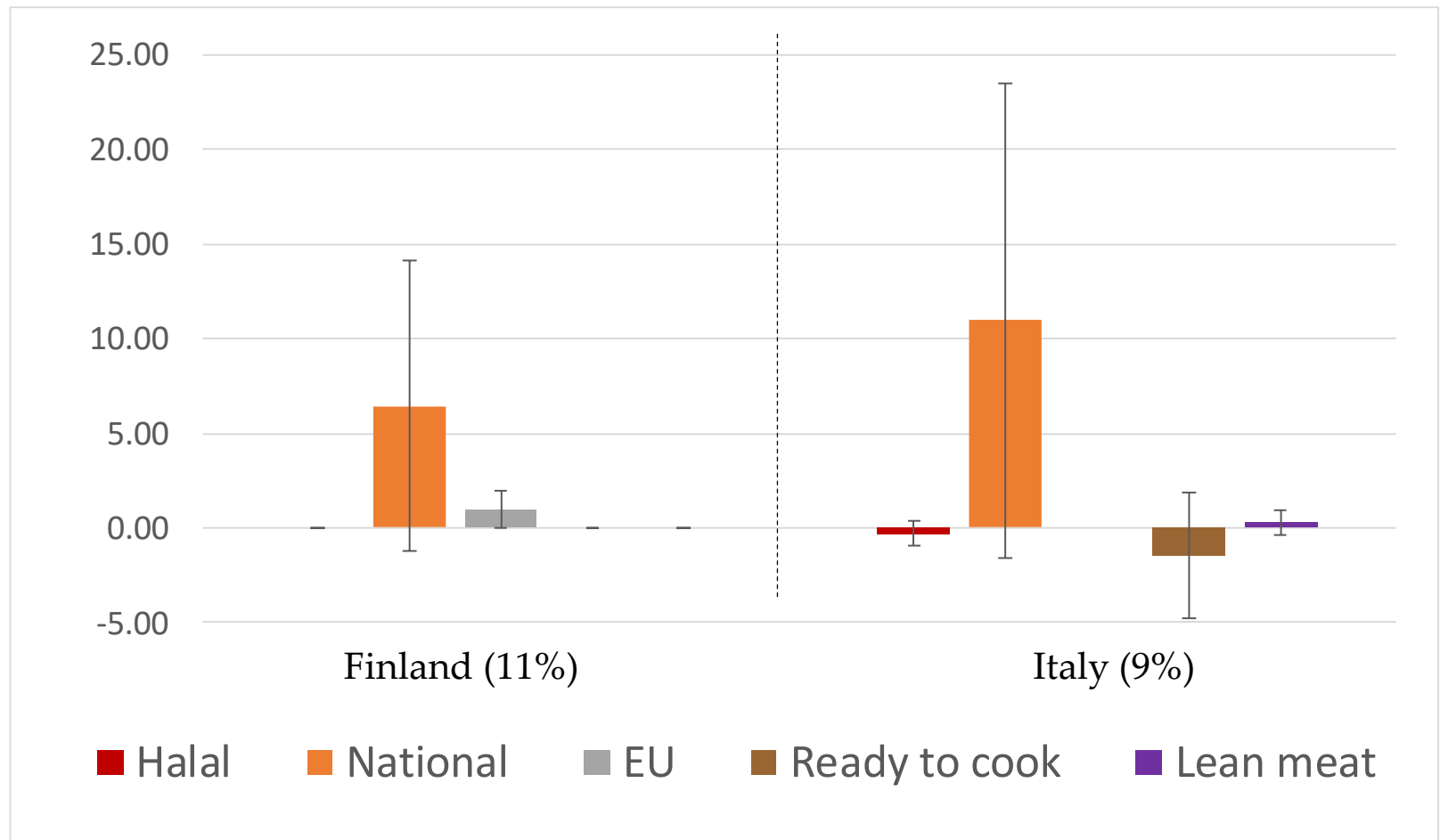
# Price sensitives & Young novelty seekers



# Organic and national origin focus



# Nationalists












# Let's continue with ewe and goat cheese!







# Methods: choice experiment structure –CHEESE

- Stated preferences, online survey
  - Cheap talk to reduce hypothetical bias (hypothetical WTP > actual WTP)
- 18 choice sets, 2 blocks, 8 attributes
- 2 Labels, 5 alternatives
  - Aged cheese A, Aged cheese B, Fresh cheese A, Fresh cheese B
  - A no-choice alternative
- 410 regular cheese consumers per country:
  - ES, FI, FR, GR, IT, TR, UK
  - Consumption of lamb/goat-milk cheese at least once per year

# Choice experiment design for cheese

Attributes	Aged cheese A	Aged cheese B	Fresh cheese A	Fresh cheese B
Milk source	<ul style="list-style-type: none"> <li>•Ewe</li> <li>•Goat</li> <li>•Cow</li> <li>•Mixed</li> </ul>	<ul style="list-style-type: none"> <li>•Ewe</li> <li>•Goat</li> <li>•Cow</li> <li>•Mixed</li> </ul>	<ul style="list-style-type: none"> <li>•Ewe</li> <li>•Goat</li> <li>•Cow</li> <li>•Mixed</li> </ul>	<ul style="list-style-type: none"> <li>•Ewe</li> <li>•Goat</li> <li>•Cow</li> <li>•Mixed</li> </ul>
Pasteurised	<ul style="list-style-type: none"> <li>•Pasteurised</li> <li>•Raw</li> </ul>	<ul style="list-style-type: none"> <li>•Pasteurised</li> <li>•Raw</li> </ul>	<ul style="list-style-type: none"> <li>•Pasteurised</li> <li>•Raw</li> </ul>	<ul style="list-style-type: none"> <li>•Pasteurised</li> <li>•Raw</li> </ul>
Rennet	<ul style="list-style-type: none"> <li>•Animal rennet</li> <li>•Non animal rennet</li> </ul>	<ul style="list-style-type: none"> <li>•Animal rennet</li> <li>•Non animal rennet</li> </ul>	<ul style="list-style-type: none"> <li>•Animal rennet</li> <li>•Non animal rennet</li> </ul>	<ul style="list-style-type: none"> <li>•Animal rennet</li> <li>•Non animal rennet</li> </ul>
Salt content	<ul style="list-style-type: none"> <li>•Low salt</li> <li>•None</li> </ul>	<ul style="list-style-type: none"> <li>•Low salt</li> <li>•None</li> </ul>	<ul style="list-style-type: none"> <li>•Low salt</li> <li>•None</li> </ul>	<ul style="list-style-type: none"> <li>•Low salt</li> <li>•None</li> </ul>
Organic				
Origin	<ul style="list-style-type: none"> <li>•National</li> <li>•EU</li> </ul>	<ul style="list-style-type: none"> <li>•National</li> <li>•EU</li> </ul>	<ul style="list-style-type: none"> <li>•National</li> <li>•EU</li> </ul>	<ul style="list-style-type: none"> <li>•National</li> <li>•EU</li> </ul>
PDO/PGI				
Price	<ul style="list-style-type: none"> <li>•Average price</li> <li>•-30%</li> <li>•+30%</li> </ul>	<ul style="list-style-type: none"> <li>•Average price</li> <li>•-30%</li> <li>•+30%</li> </ul>	<ul style="list-style-type: none"> <li>•Average price</li> <li>•-30%</li> <li>•+30%</li> </ul>	<ul style="list-style-type: none"> <li>•Average price</li> <li>•-30%</li> <li>•+30%</li> </ul>

# Choice experiment for cheese

Fresh cheese A	Aged cheese A	Fresh cheese B	Aged cheese B	
Milk source: Ewe milk	Milk source: Ewe milk	Milk source: Mixed goat and cow milk	Milk source: Mixed goat and cow milk	None
Raw milk	Pasteurized	Raw milk	Pasteurized	
Animal rennet	Non-animal rennet	Animal rennet	Non-animal rennet	
-	Low salt	-	Low salt	
-			-	
Origin: EU	Origin: UK	Origin: UK	Origin: UK	
	-	-		
Price: 5.57 euro	Price: 4.28 euro	Price: 3 euro	Price: 7.95 euro	

# Results for cheese



# Results for cheese type

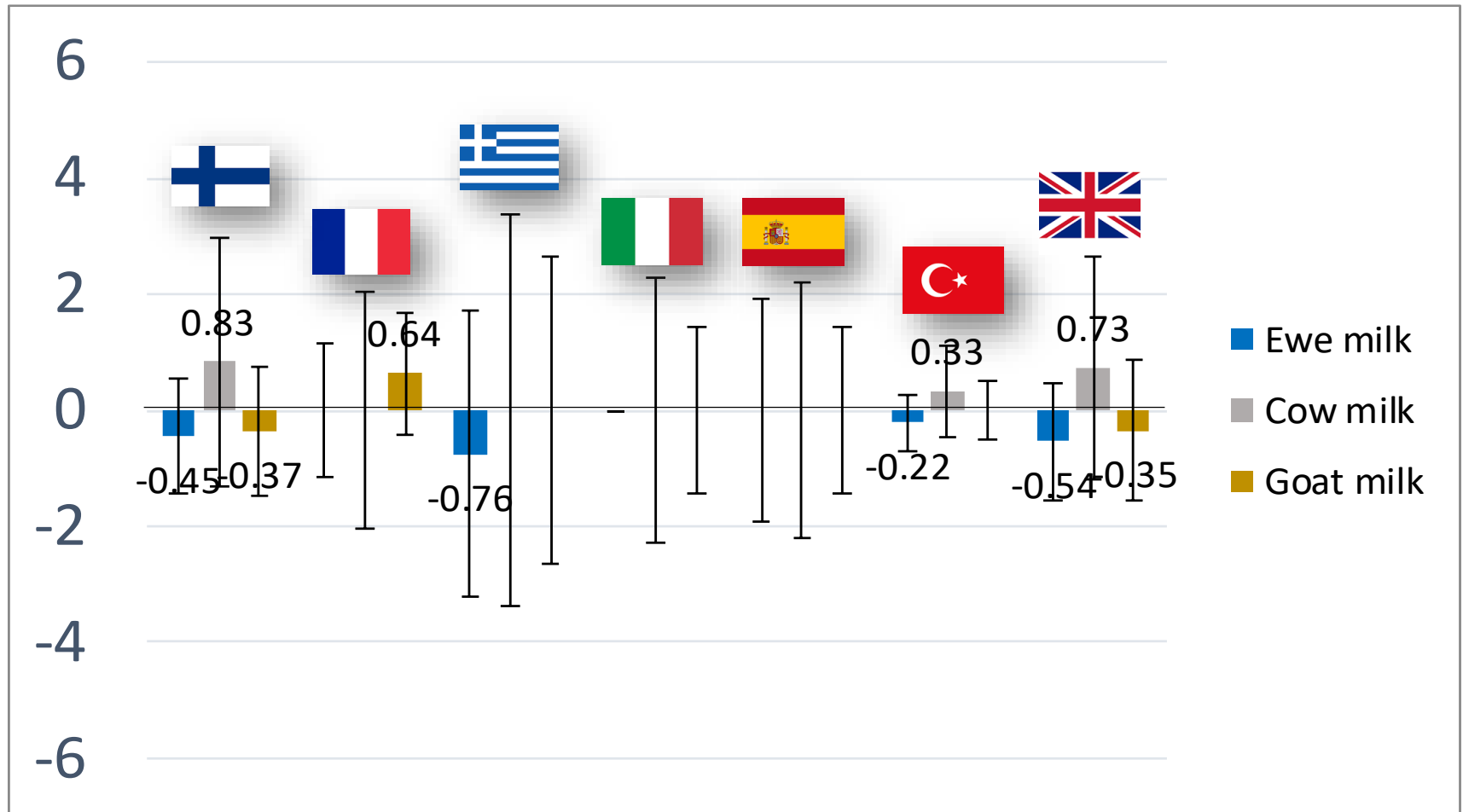
\*None is the reference category

Meat	Finland	France	Greece	Italy	Spain	Turkey	UK
None	—	—	—	—	—	—	—
Aged cheese	↑	↑↑	↑	↑	↑↑	↑	↑
Fresh cheese	↑↑	↑	↑↑	↑↑	↑↑	↑↑	↑↑

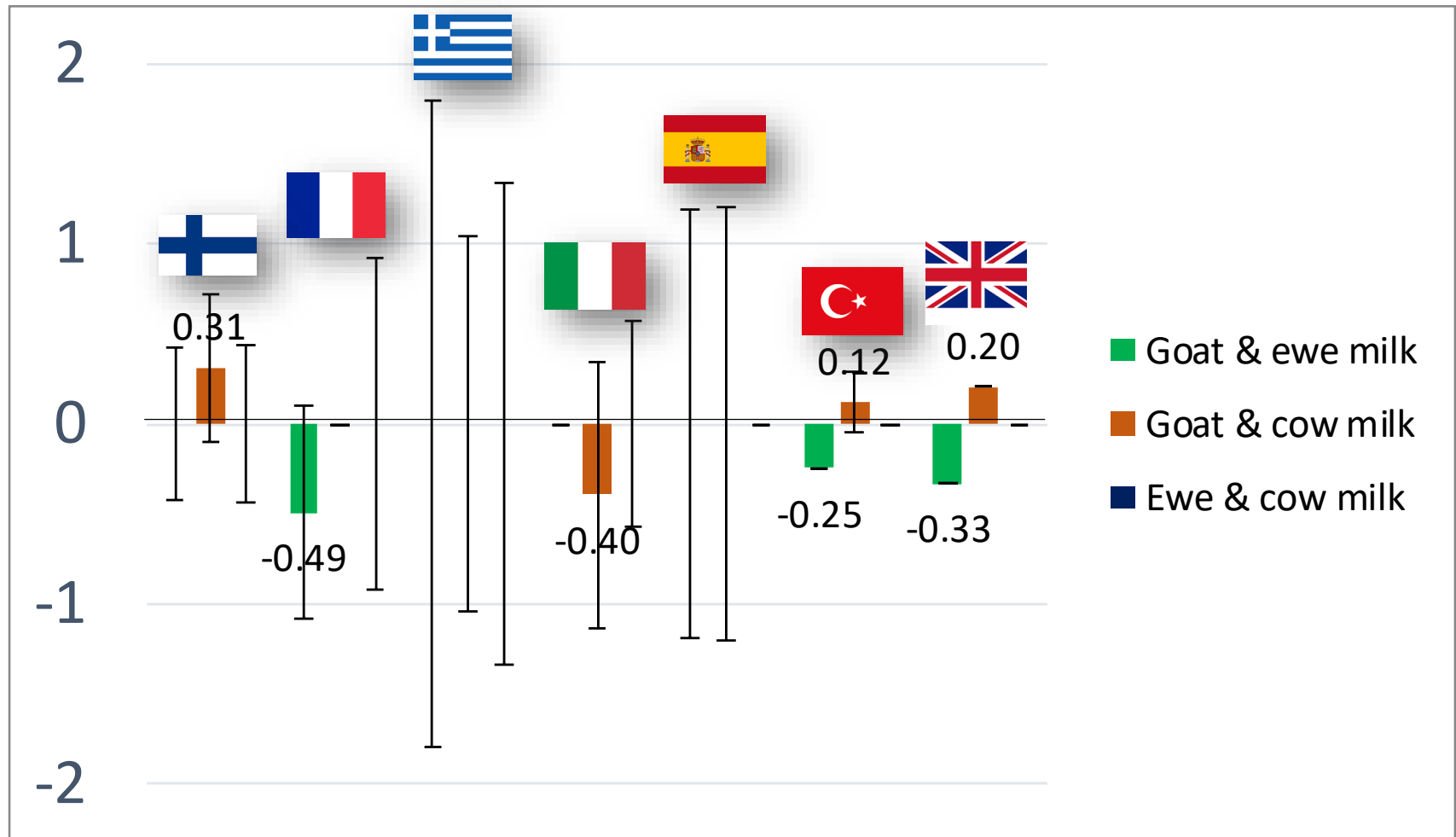
5% significance level



# Average WTP (€) for one type milk cheese

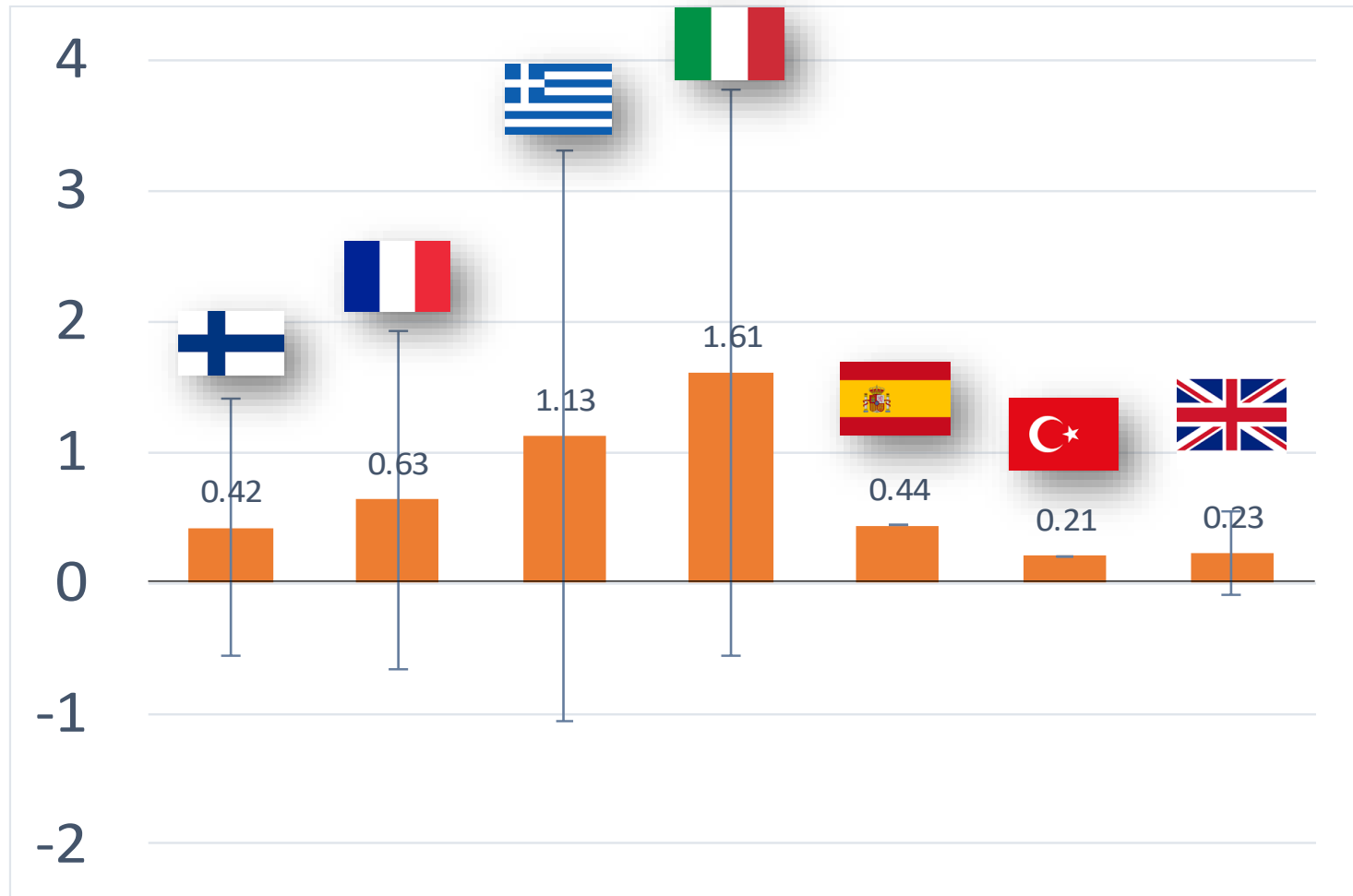


# Average WTP (€) for mixed-milk cheese

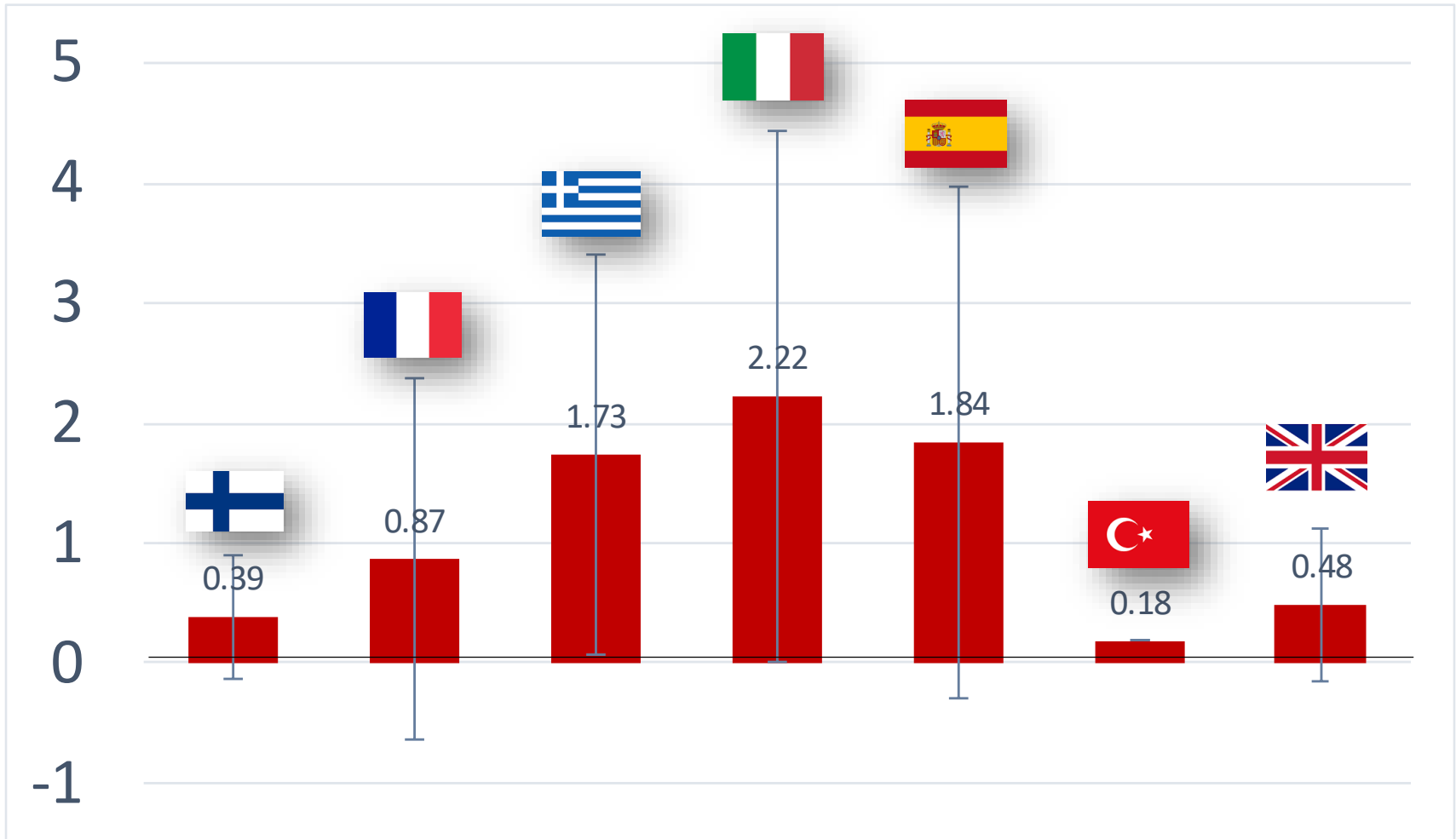




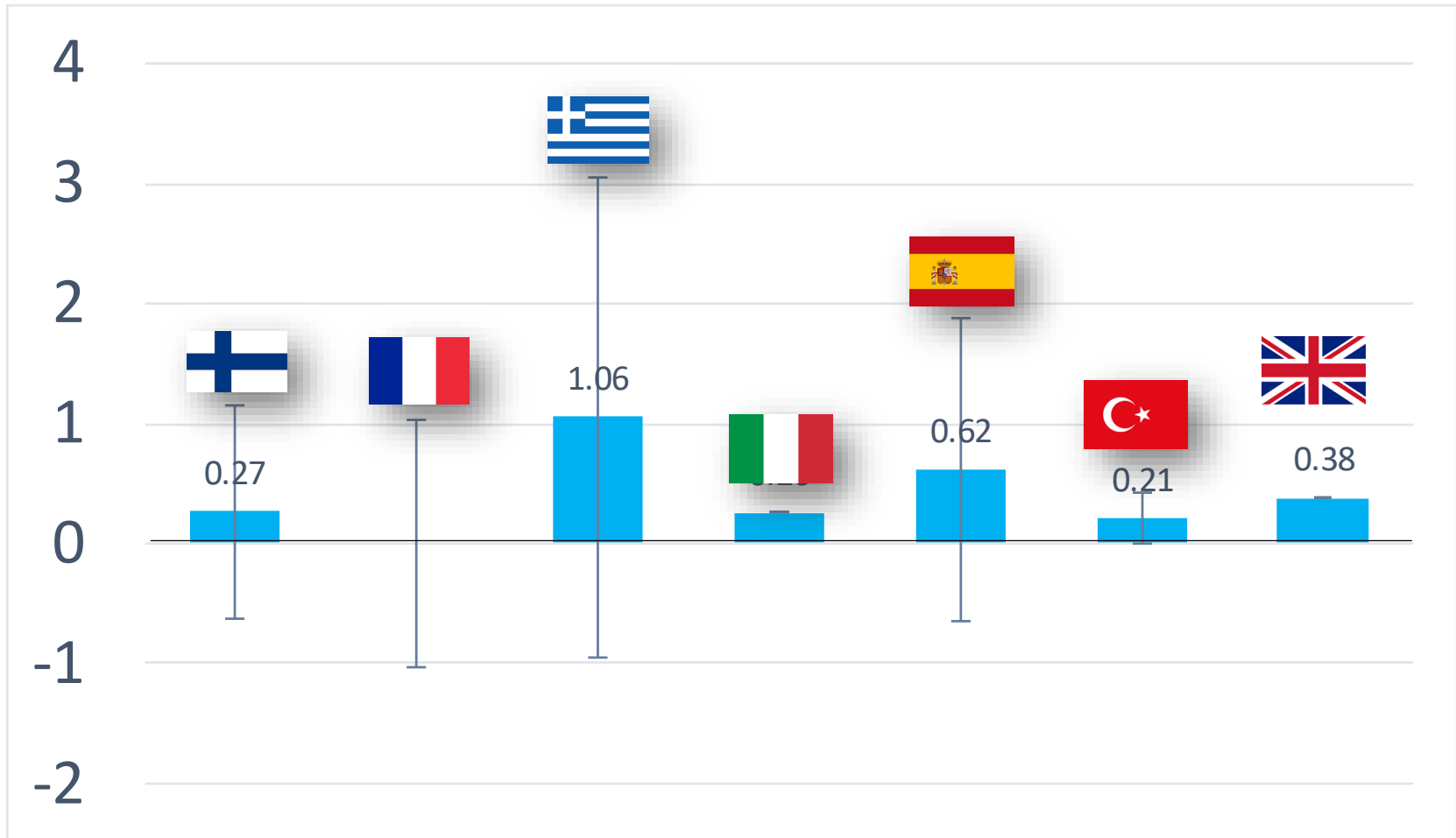
# Average WTP (€) cheese national origin



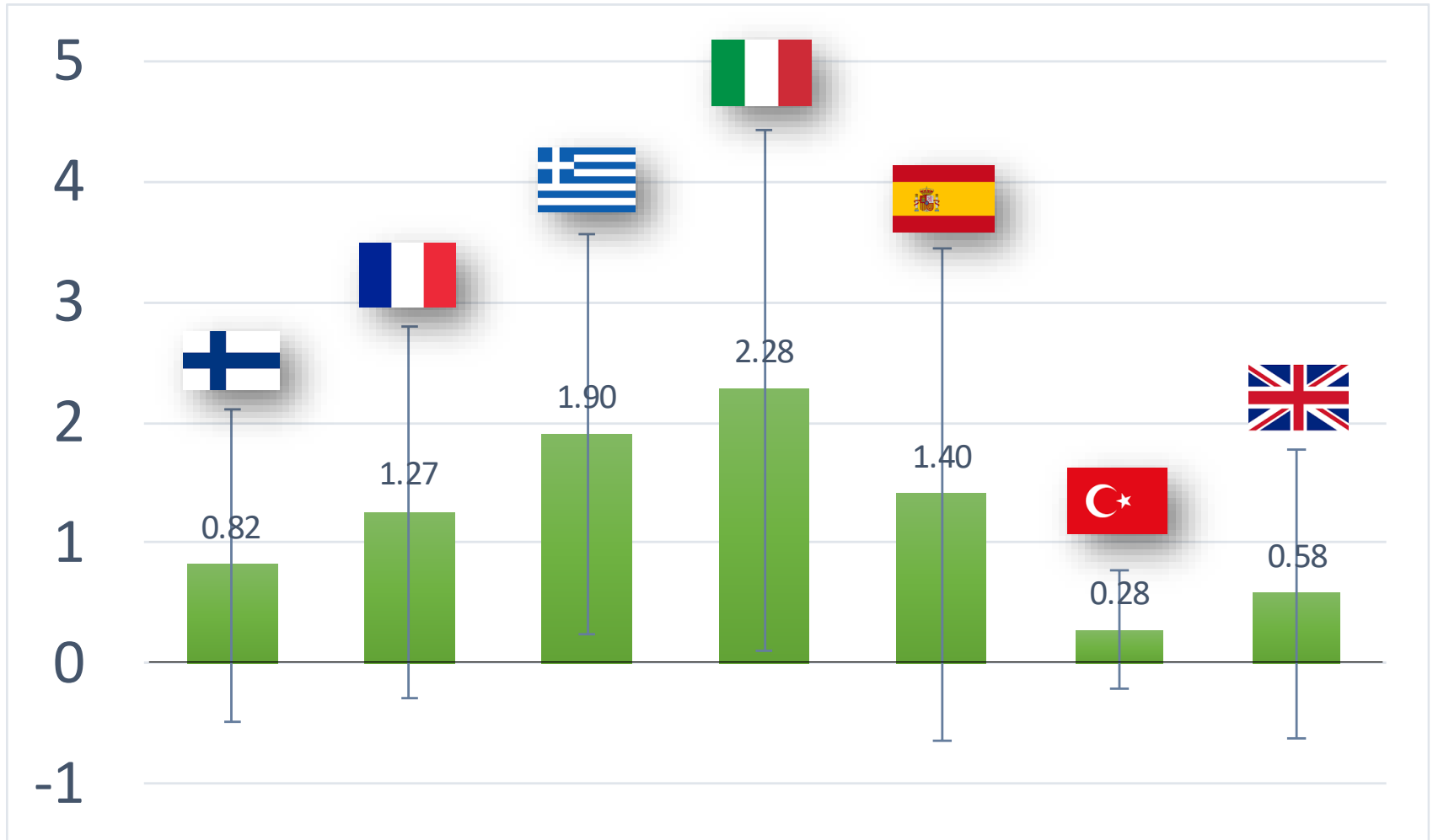
# Average WTP (€) for PDO



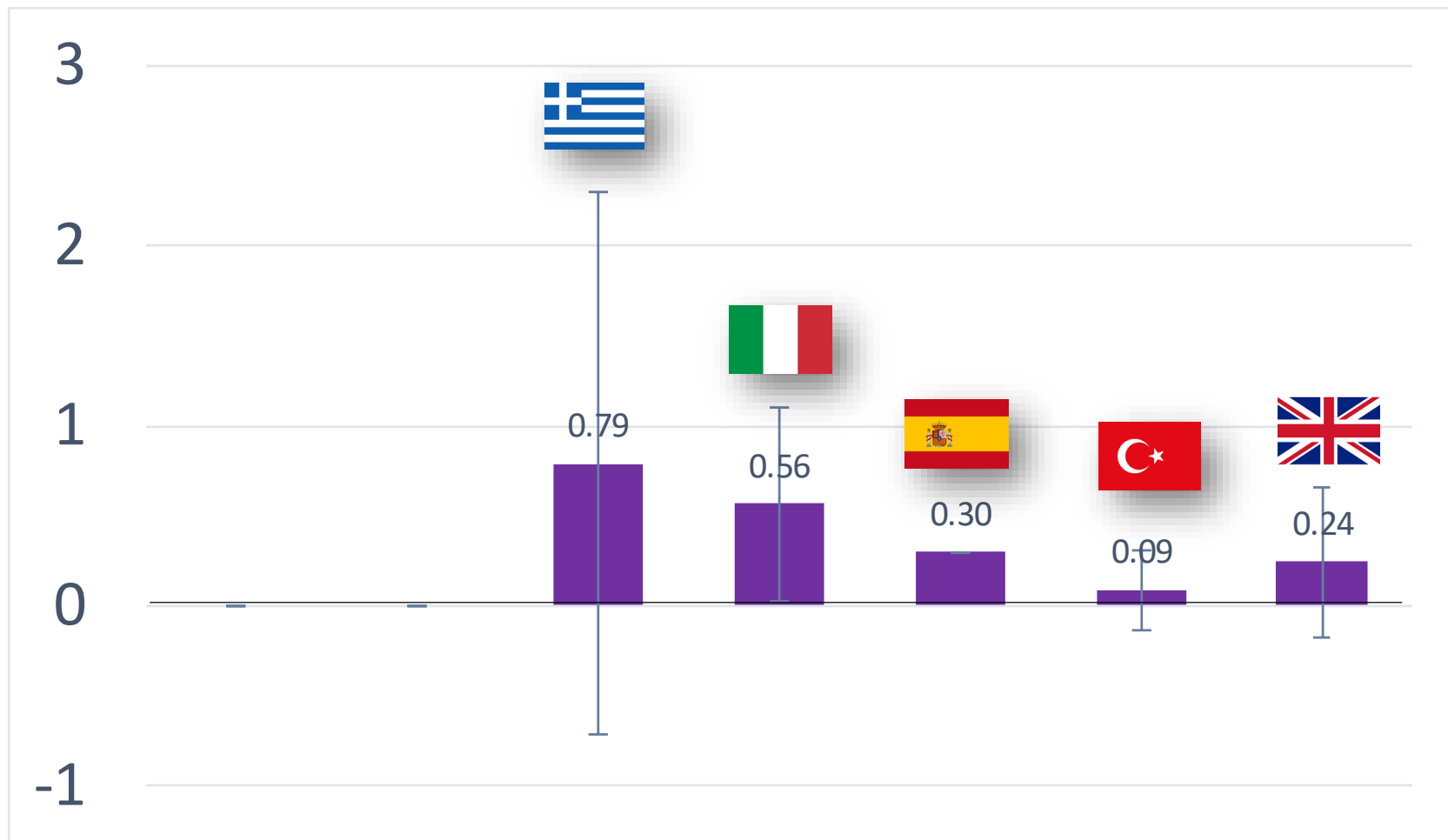
# Average WTP (€) for pasteurised cheese



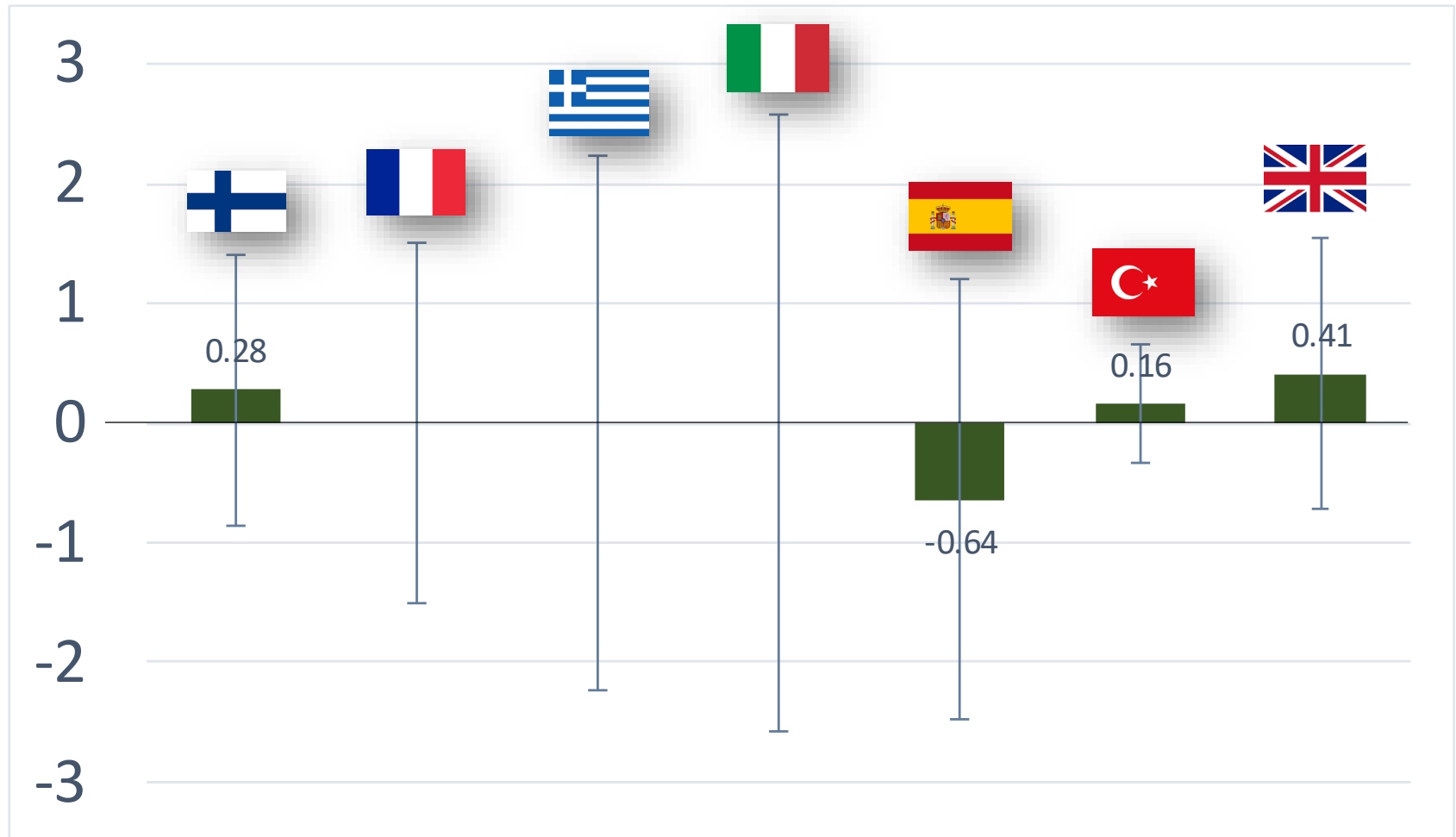
# Average WTP (€) for organic cheese



# Average WTP (€) for low salt content



# Average WTP (€) for vegetable rennet



# Cheese segments

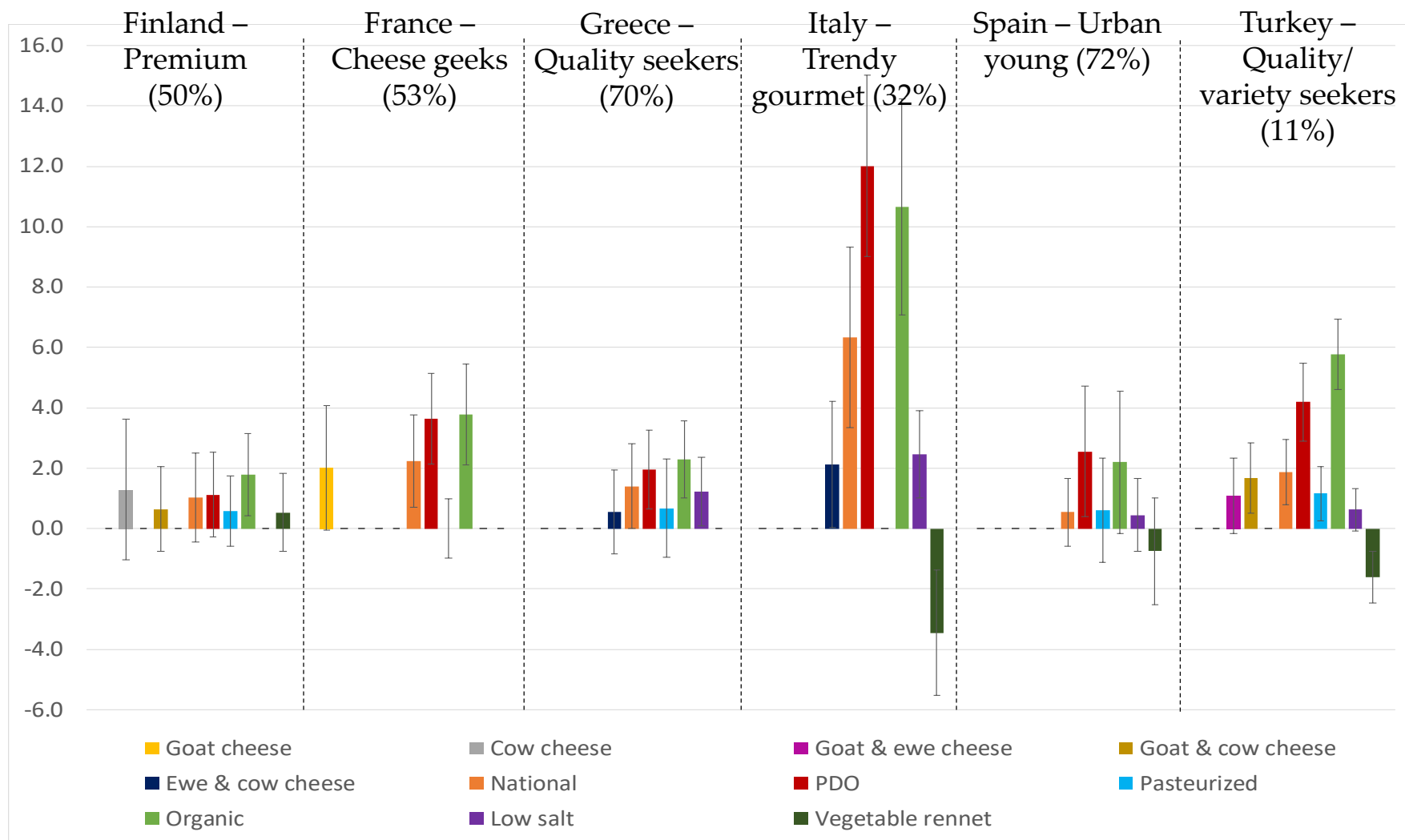


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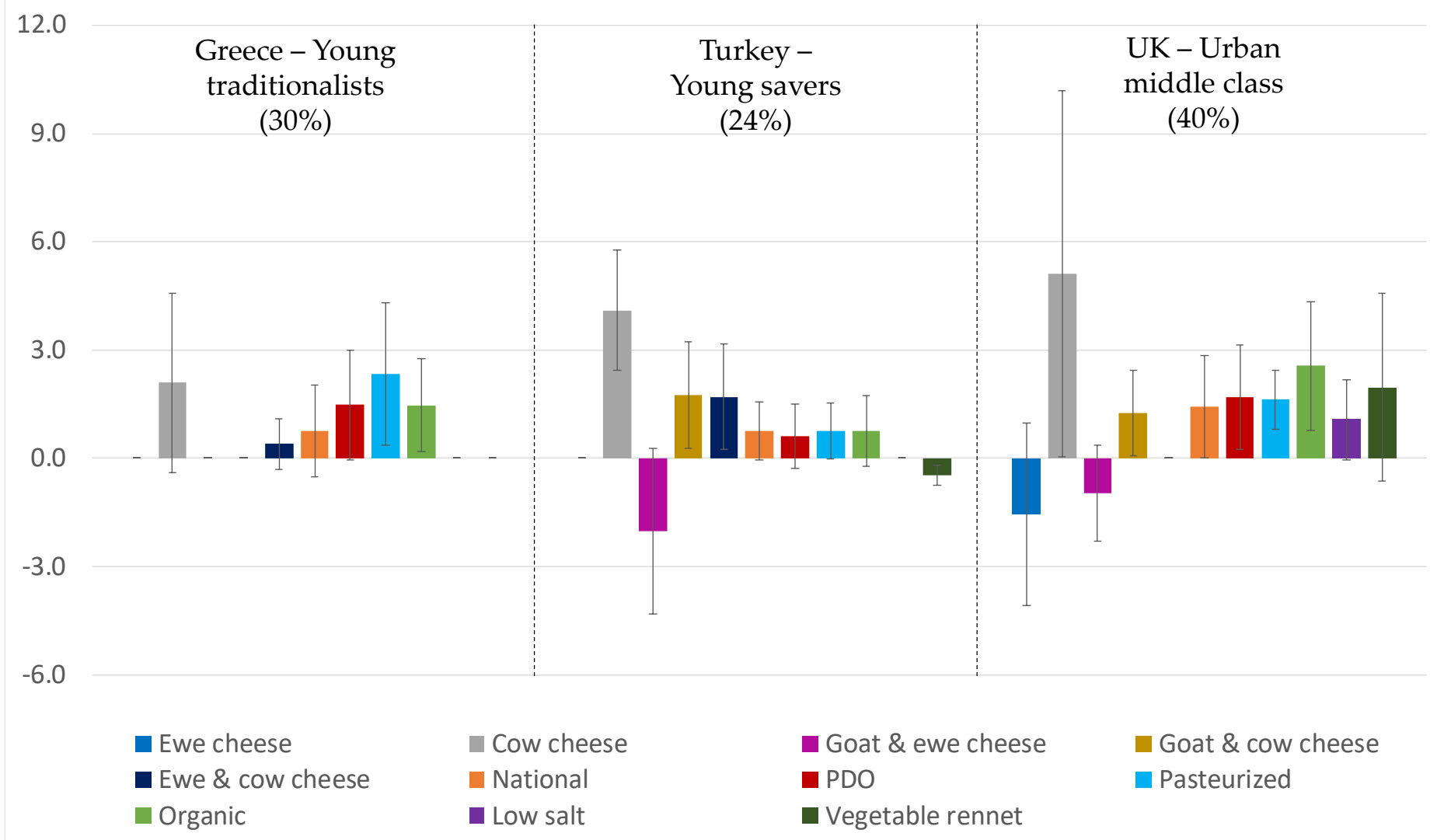
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# Premium segments search Organic and PDO

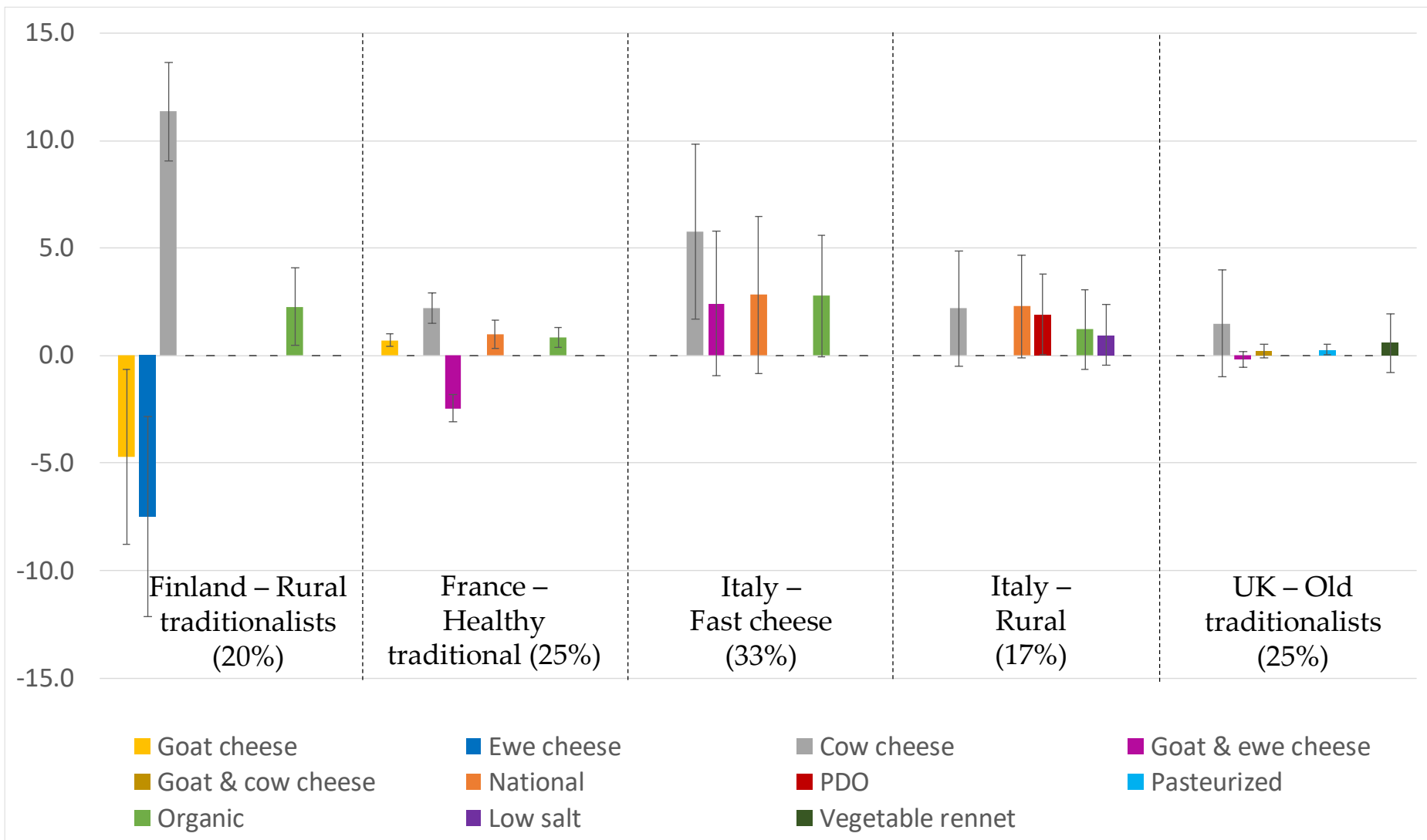




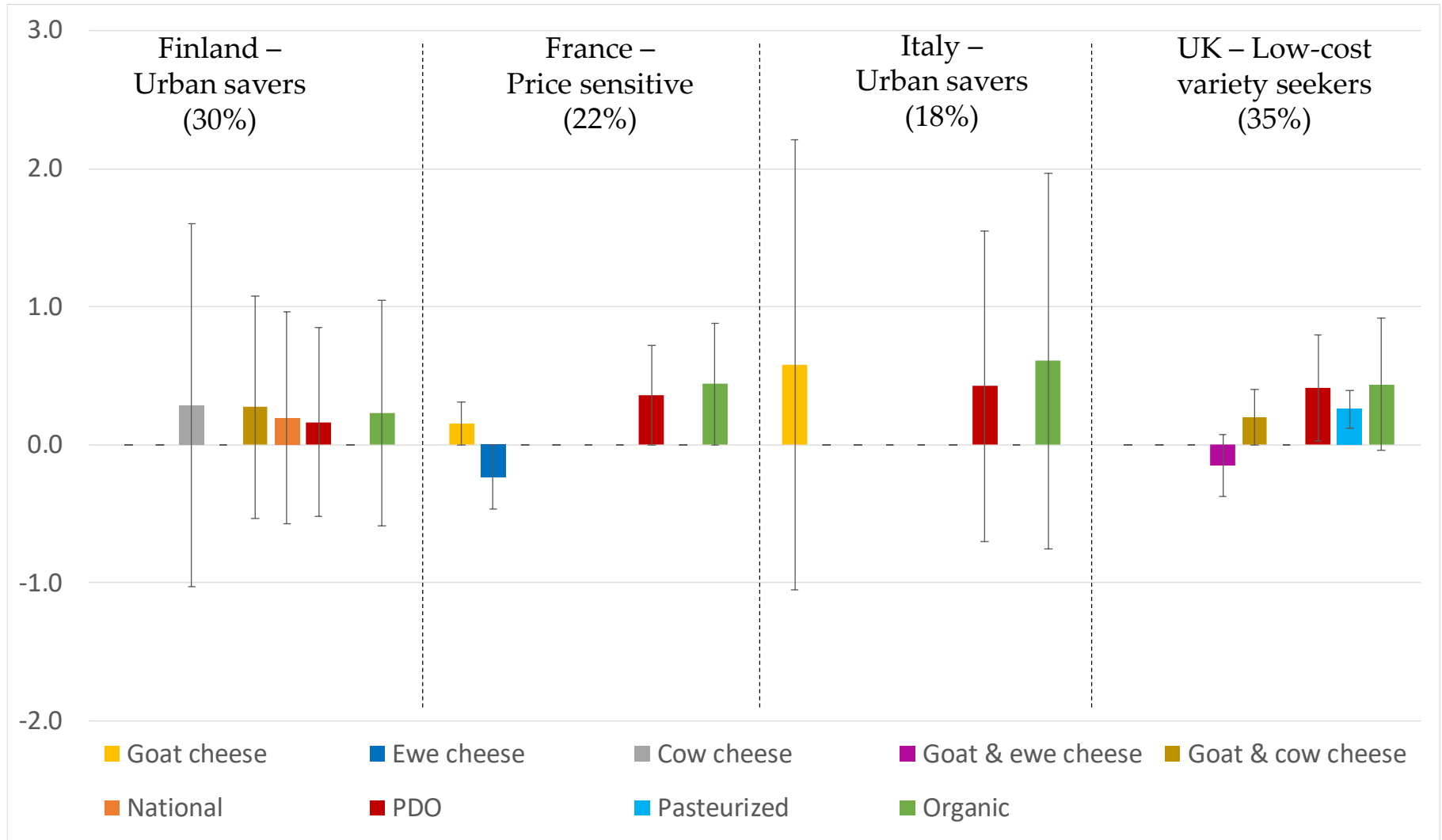
# Young but not alike



# Rural and traditional



# Price sensitive segments look for few attributes



# Recommendations



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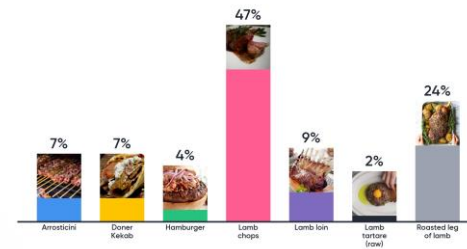
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# Challenges

- Carcase imbalance & the need of new cuts
- Households spend less time preparing and cooking meals
  - **Ready-to-eat or Ready-to-cook meals?**
  - **Increase share of food is eaten out-of-home**
- Switching to other meat
  - **Chicken is consistently increasing and replacing other meats**
- Cow milk-cheese prominent segment

What lamb preparation you would choose (max 2)?

Mentimeter

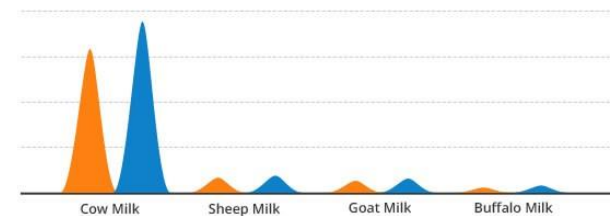


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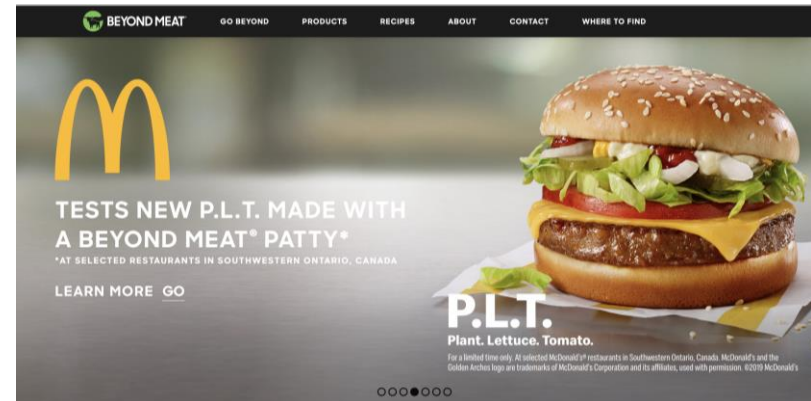
GLOBAL CHEESE MARKET

BY SOURCE

2017 2023



The **COW MILKS** segment dominates the global cheese market and is expected to dominate throughout the forecast period.



# Meat substitutes: Beyond meat...

<https://www.beyondmeat.com>

# Beyond meat



BEYOND MEAT

GO BEYOND

PRODUCTS

RECIPES

ABOUT

CONTACT

WHERE TO FIND

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VS

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○○○○○○●





## ...and beyond milk (no-moooh cheeses)







# Antifragility

- «Antifragility is beyond resilience or robustness. The resilient resists shocks and stays the same; the antifragile gets better»  
(N. Taleb)

# How to become antifragile?

- The small ruminants sector is mainly unbranded (meat) or, at the best, “under-branded” (cheese>).
  - You have generic/PDO cheese names (like feta, pecorino), or PDO/PGI labels in meat, but no real renown brands
  - Even organic label is generic, although it increases value added
- Introducing and marketing (collective) **brands** and **fancy appearance/packaging** may be a strategy to increase sales especially in the meat sector.

# Nice to meat you!

- There is nothing as little seducing than meat. Dead flesh and blood are not really sexy, unless for those who love *The walking dead*...
- Sexy, attractive, trendy appearance & packaging may help



# What about cut innovations?





# Or convenience innovations?





## Or packaging innovation?

- Packaging allows innovation in terms of shape (that has inherent symbolism), labelling, as well as serving suggestions, etc.
- **Mini-portions** are also a packaging innovation but need nudging
- That's a mean to achieve brand equity



# We live in a reputation economy



- As consumers we value experience more than knowledge and benefits more than product characteristics
- (Social) Media, Influencers, Chefs are very important





# How to become antifragile?

- Segmentation
- Innovation
- (More) Marketing
  - Branding
  - Appearance

**S.I.M.B.A.**

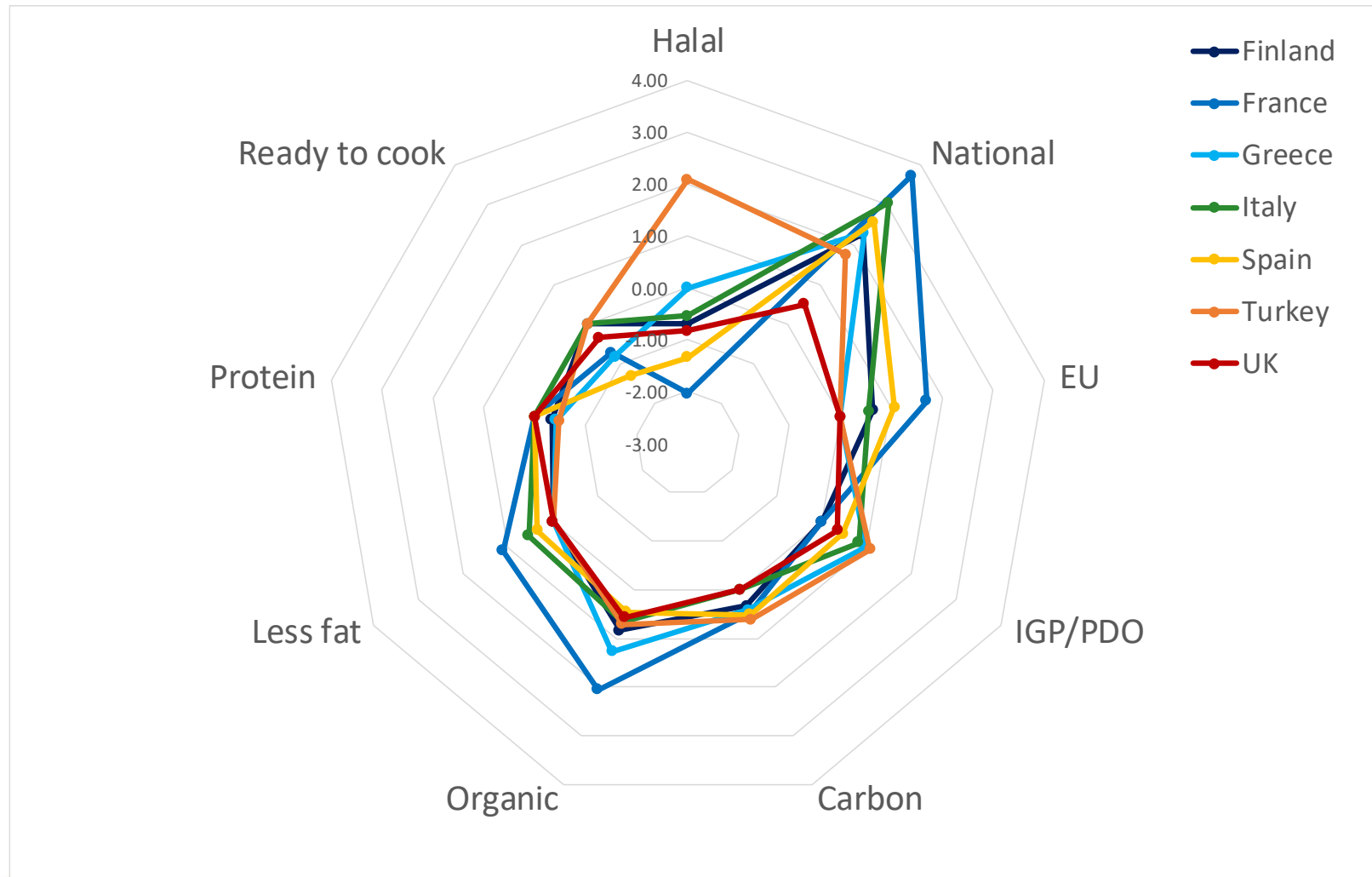






Contact: [zanoli@agrecon.univpm.it](mailto:zanoli@agrecon.univpm.it)

# Average Willingness-to-Pay (€) Comparison with other countries



# Average Willingness-to-Pay (€) Comparison with other countries

