iSAGE Training

21-22 October 2019 – Meknes, Marocco

Improving consumer perception and consumption of sheep and goat products

Raffaele Zanoli

Università Politecnica delle Marche (UNIVPM)

Ancona, Italy

iSAGE

Innovation for Sustainable Sheep and Goat Production in Europe

PART 1
Results of consumer and retailer studies

Methods: a mix of qualitative & quantitative research

	Qualitative Research	Quantitative Research
Objective	To gain a deeper understanding, contextualize a phenomenon, the why and how of things	To quantify the data and generalize the results from the sample to the population
Process	Inductive, subjective, recurrent	Deductive, objective, sequential
Sample	Small number of <u>non-representative</u> cases	Large number of <u>representative</u> cases
Data Analysis	Non-statistical	Statistical
Outcome	Develop an initial understanding, theory development	Recommend a course of action
Examples	In-depth interviews, focus groups case studies	Surveys, Experiments

Qualitative research

Results summary- MEAT

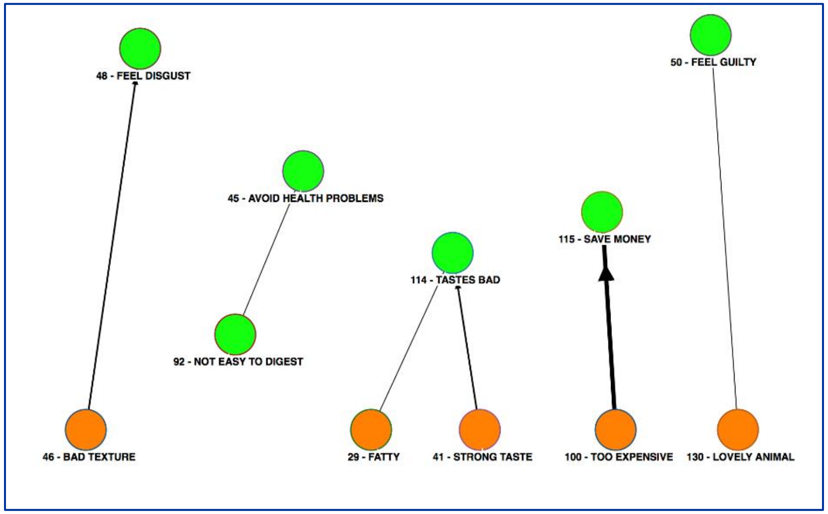
Likes

- Unique taste
- Sheep and goat raised more naturally
- More genuine and authentic

Dislikes

- Fatty
- High cooking skills required
- Less variety and availability
- Taste not familiar to young people

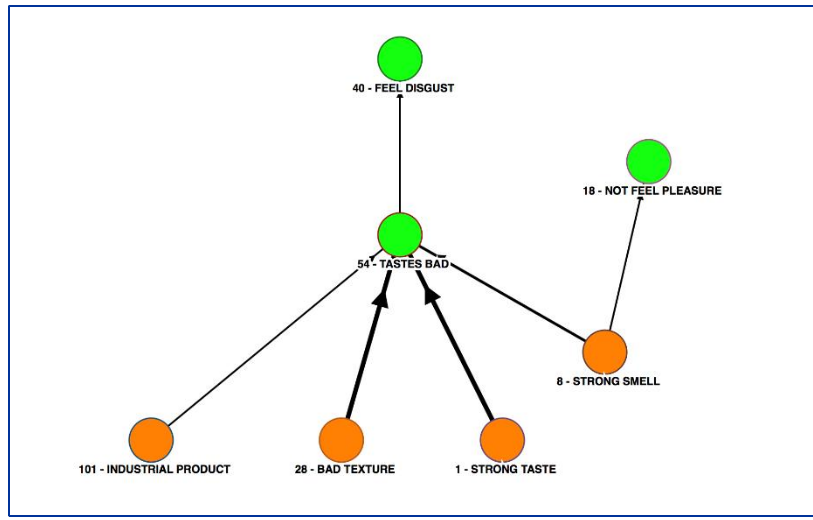
Non-consumers Motives



Results summary - Dairy

Likes	Dislikes
Unique Taste	Poor information on product labels
Versatility	High price and small variety
Sheep and goat freely graze	Taste/Smell
Healthier compared to other dairy products (cow milk)	Fatty not for daily consumption

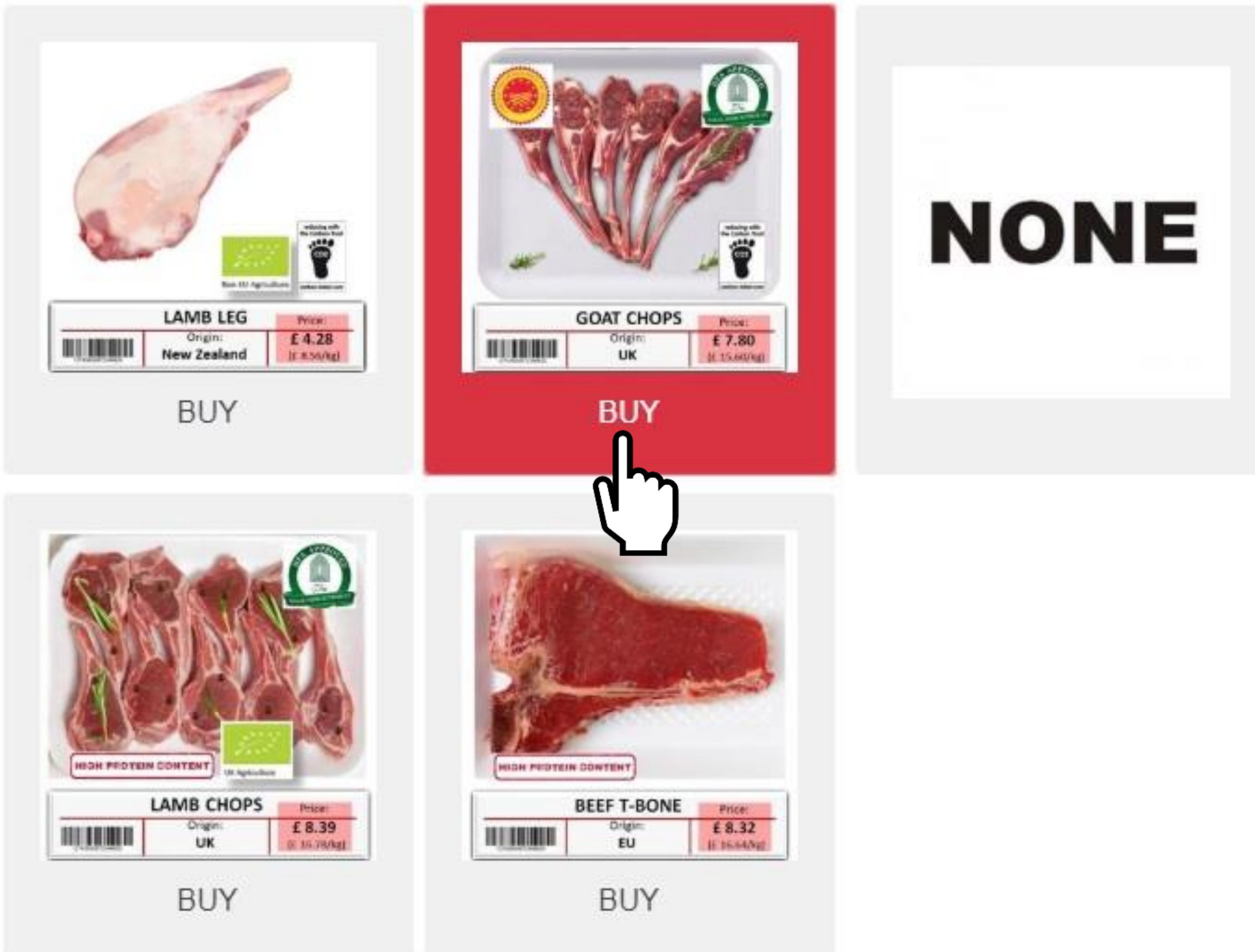
Non-consumers Motives



Quantitative research

Results on sheep and goat meat

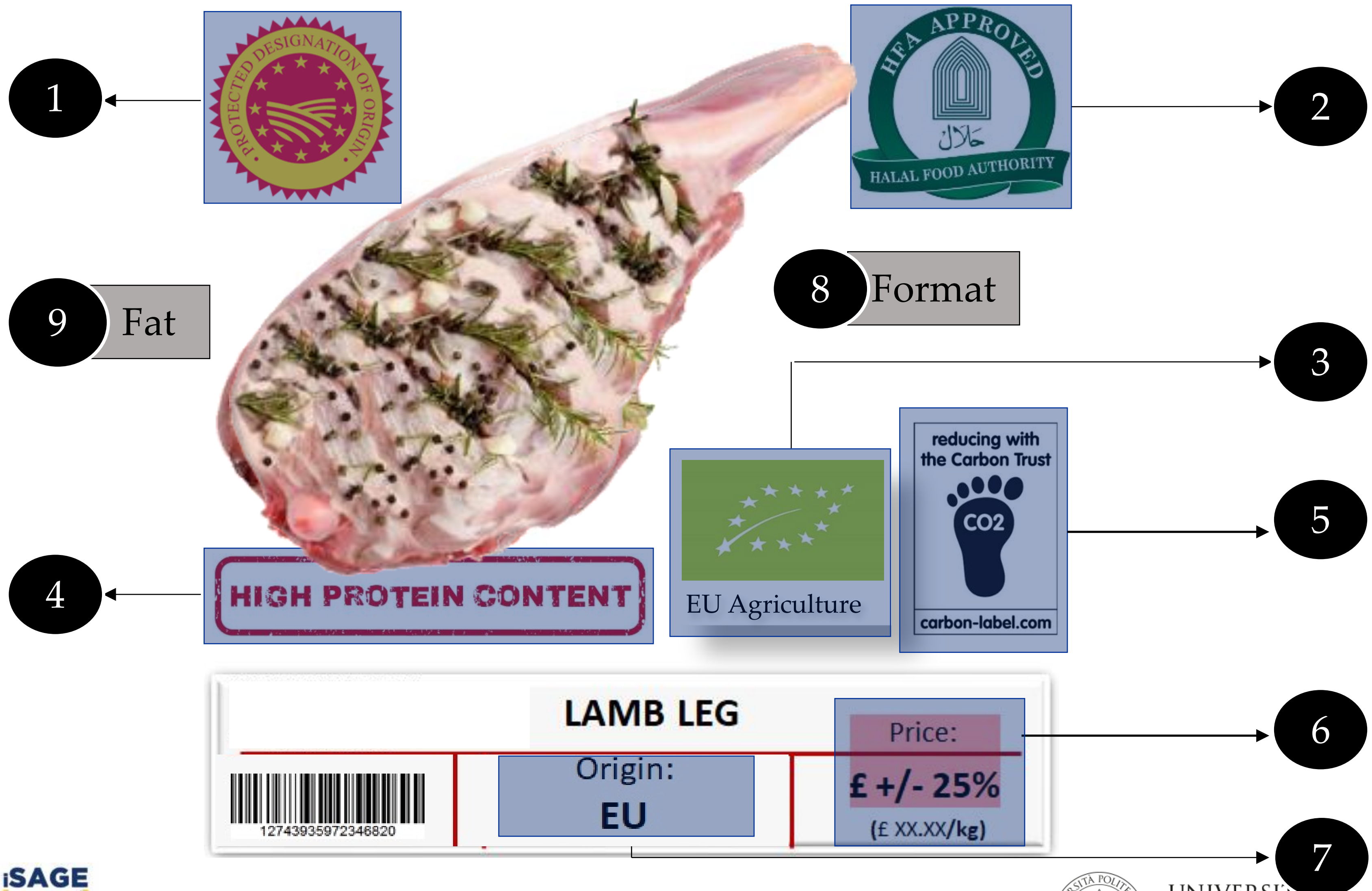
Choice experiment for meat



Choice set

Choice experiment for meat

Choice experiment attributes



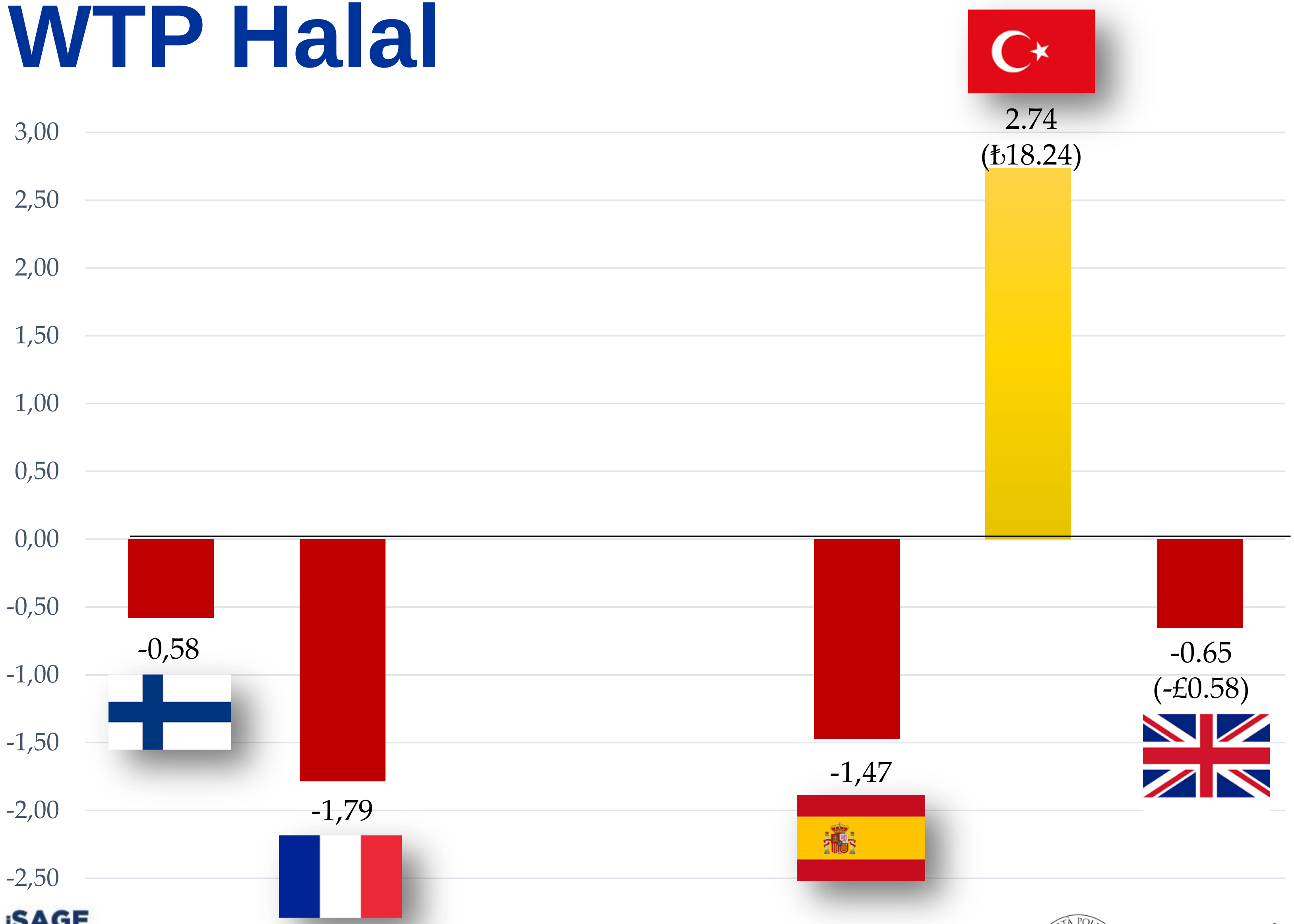
Results: meat cuts and type

*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

WTP Halal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2,00
1,50
1,00
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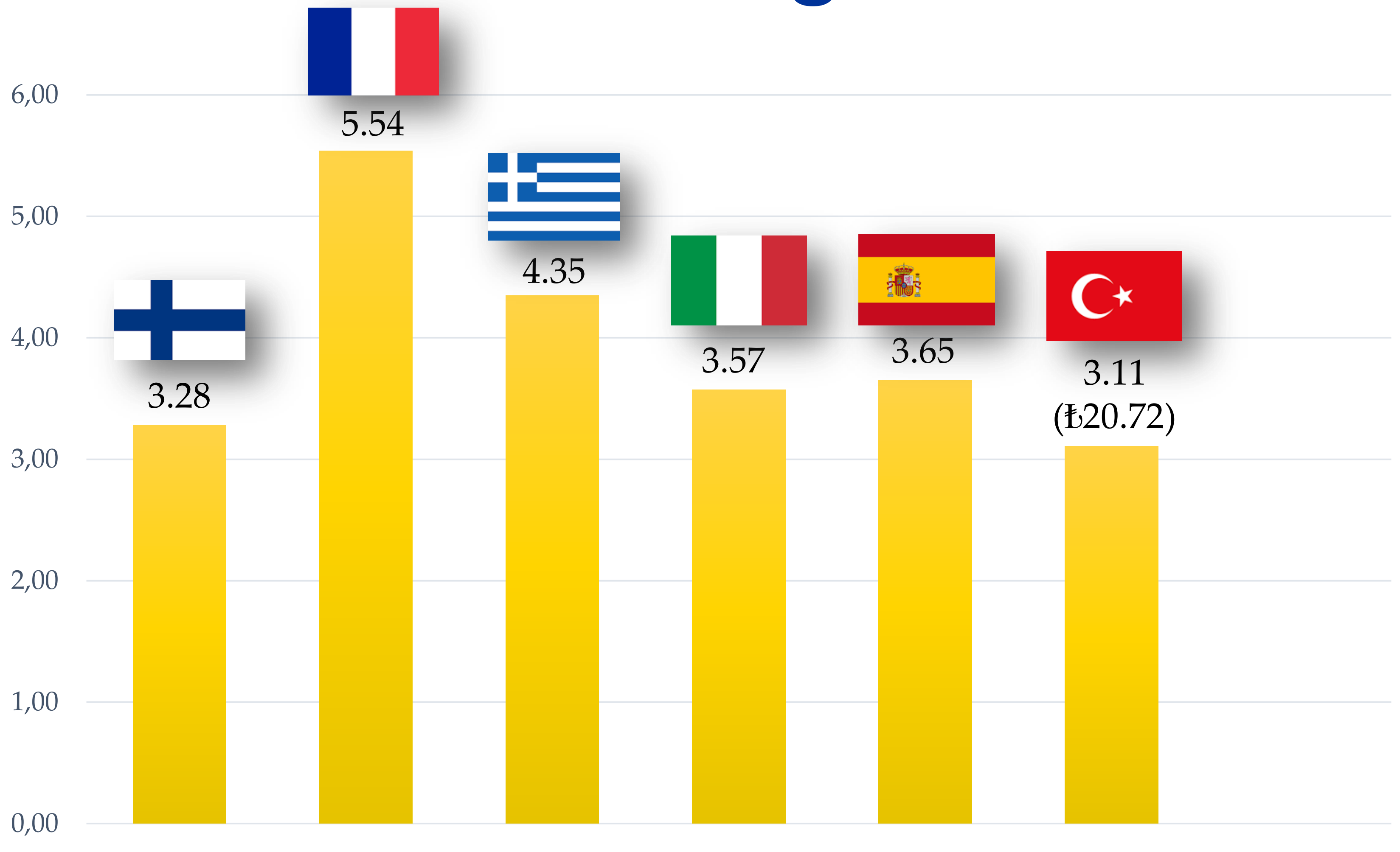
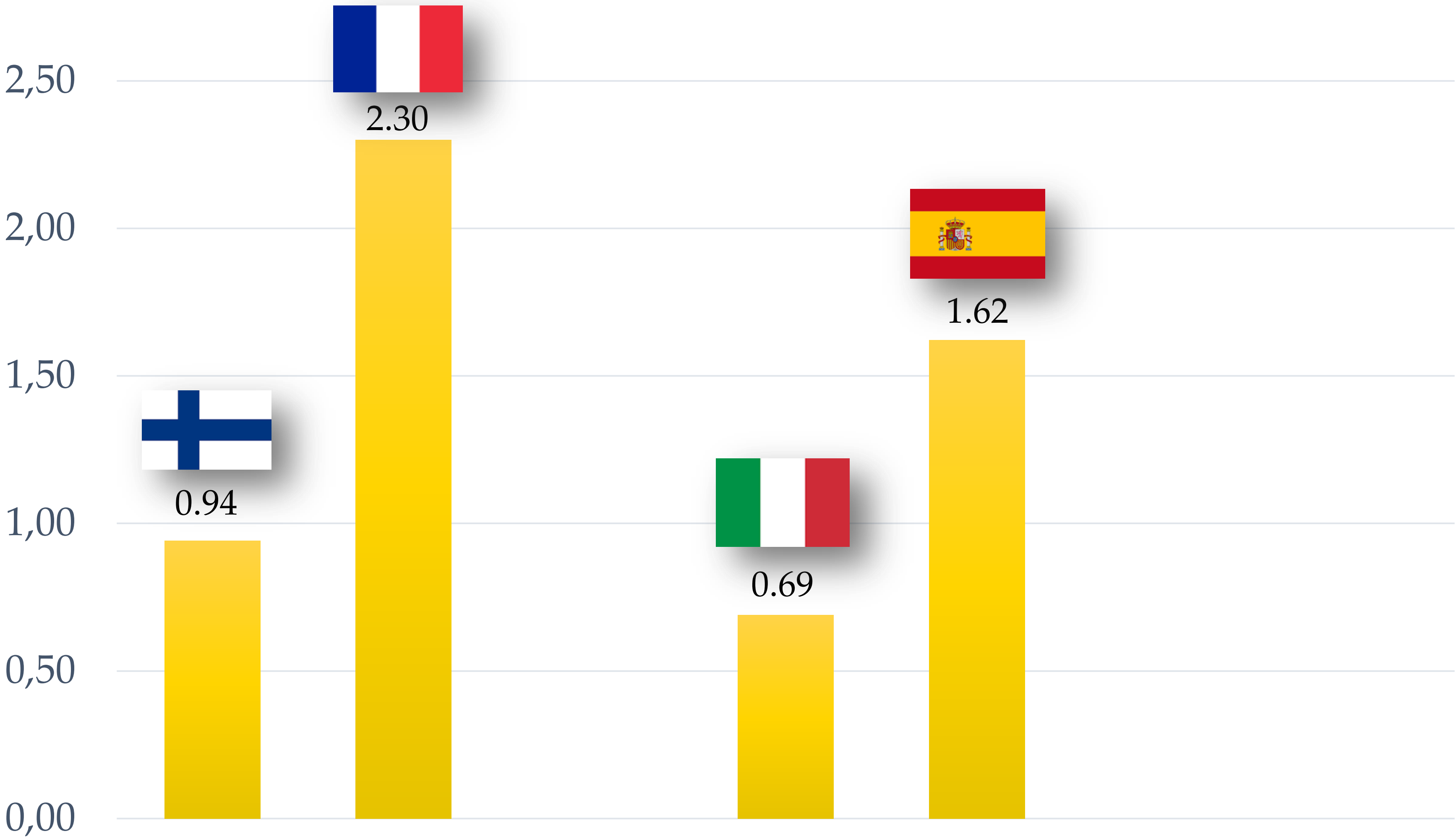
0,00
-0,50
-1,00
-1,50
-2,00
-2,50
-0,58
-1,79
-1,47
2.74
(₺18.24)
-0.65
(-£0.58)

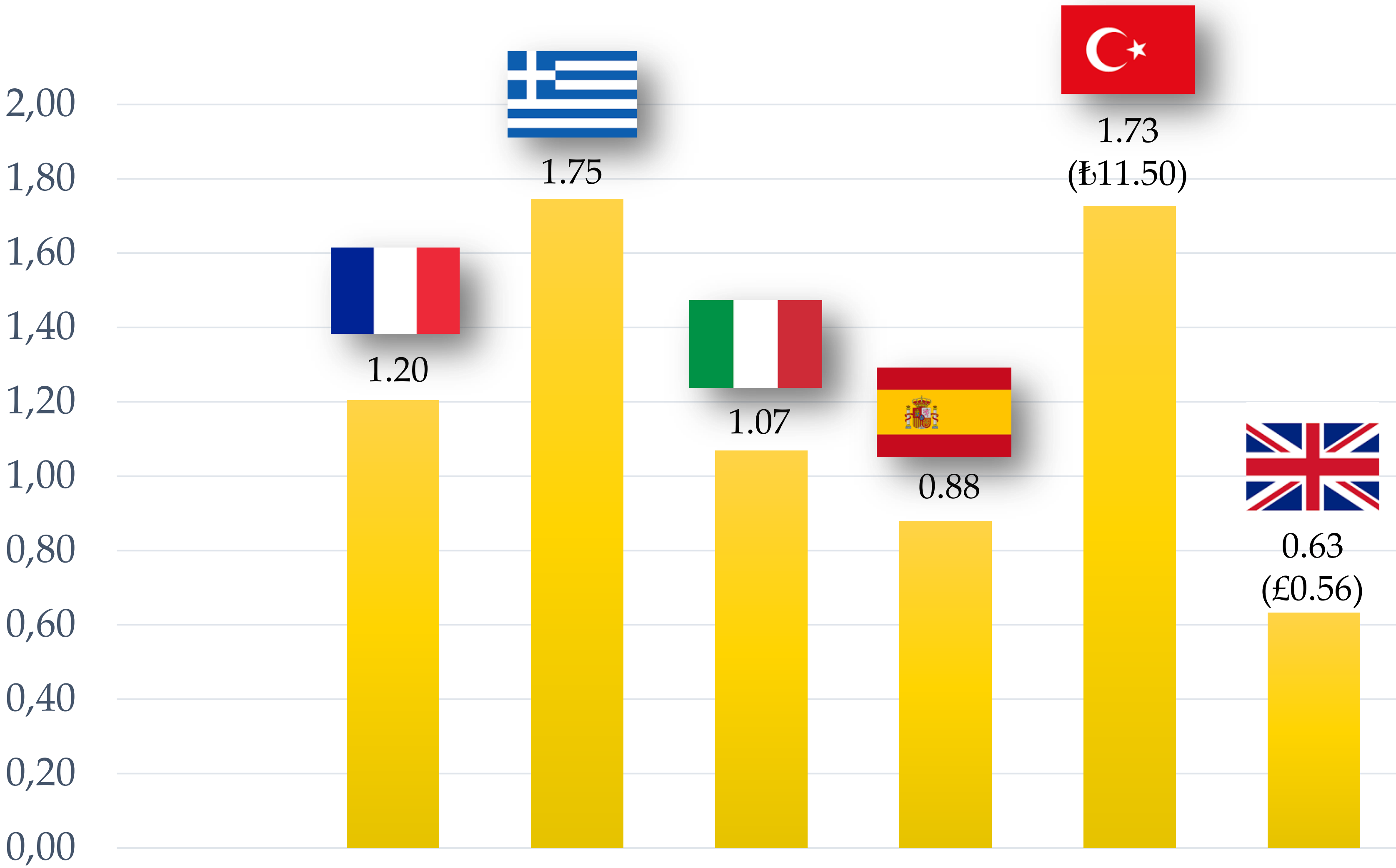
WTP National origin



WTP EU origin



WTP PGI/PDO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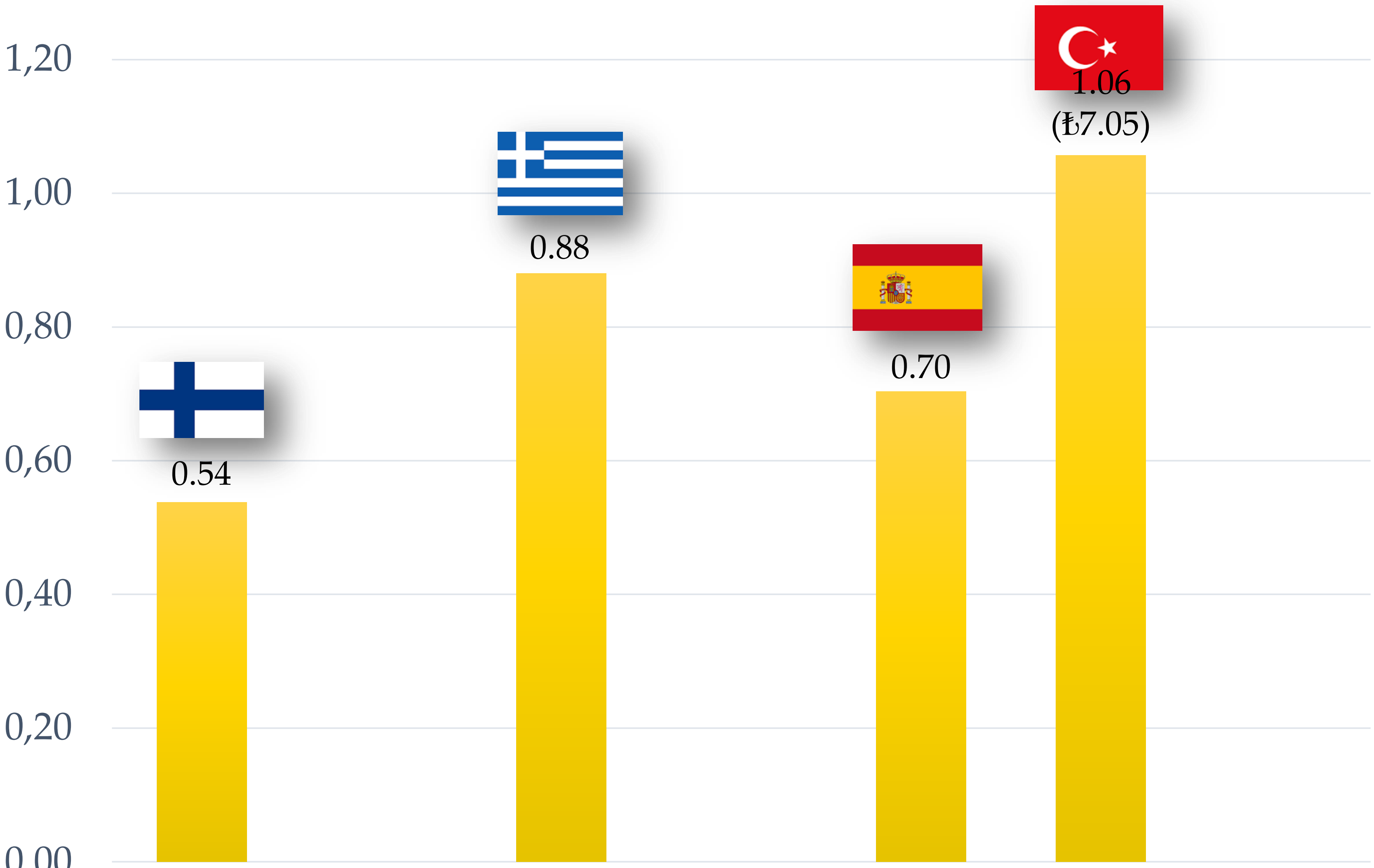
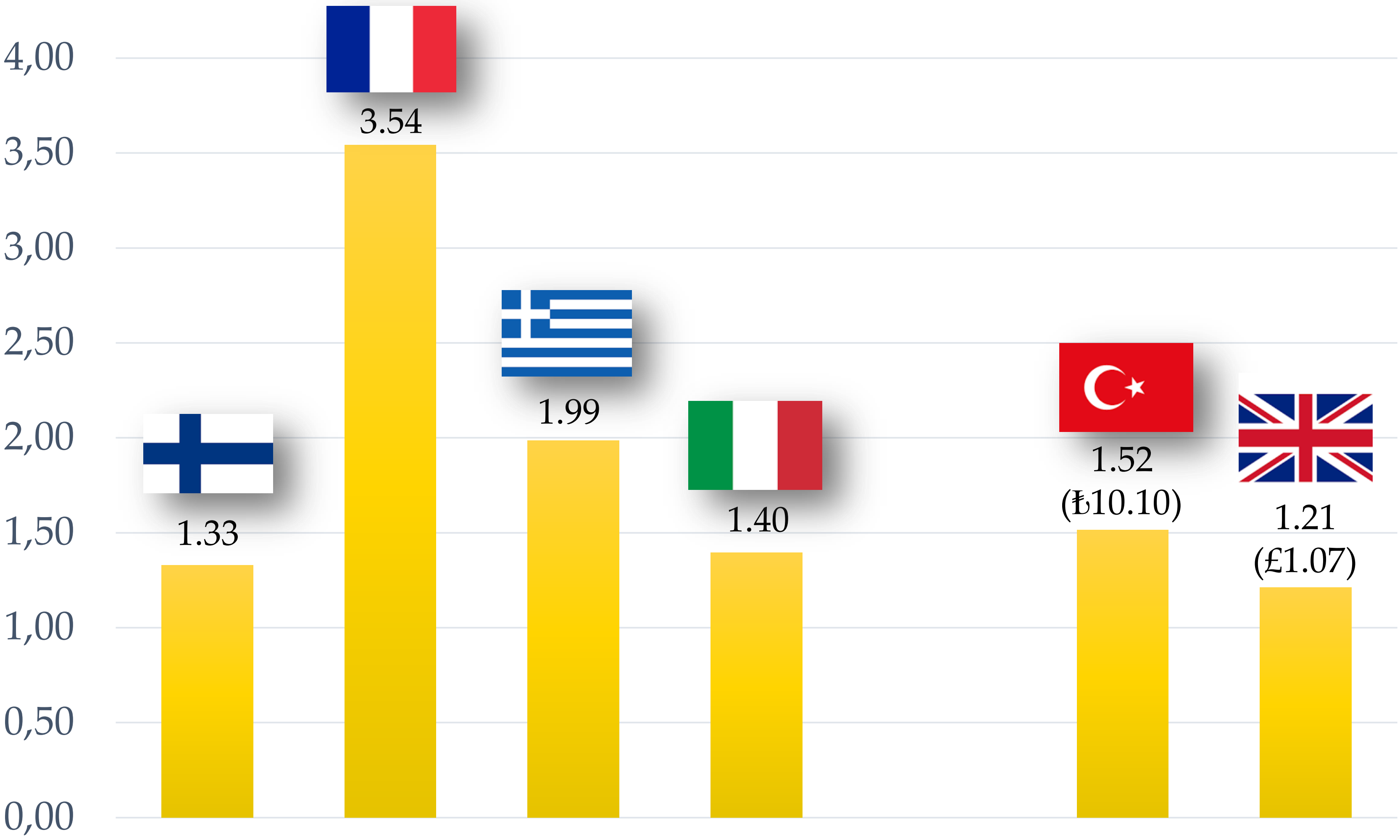
1,60
1,40
1,20
1,00
0,80
0,60
0,40
0,20
0,00
1.20
1.75
1.07
0.88
1.73
(₺11.50)
0.63
(£0.56)

WTP Carbon label



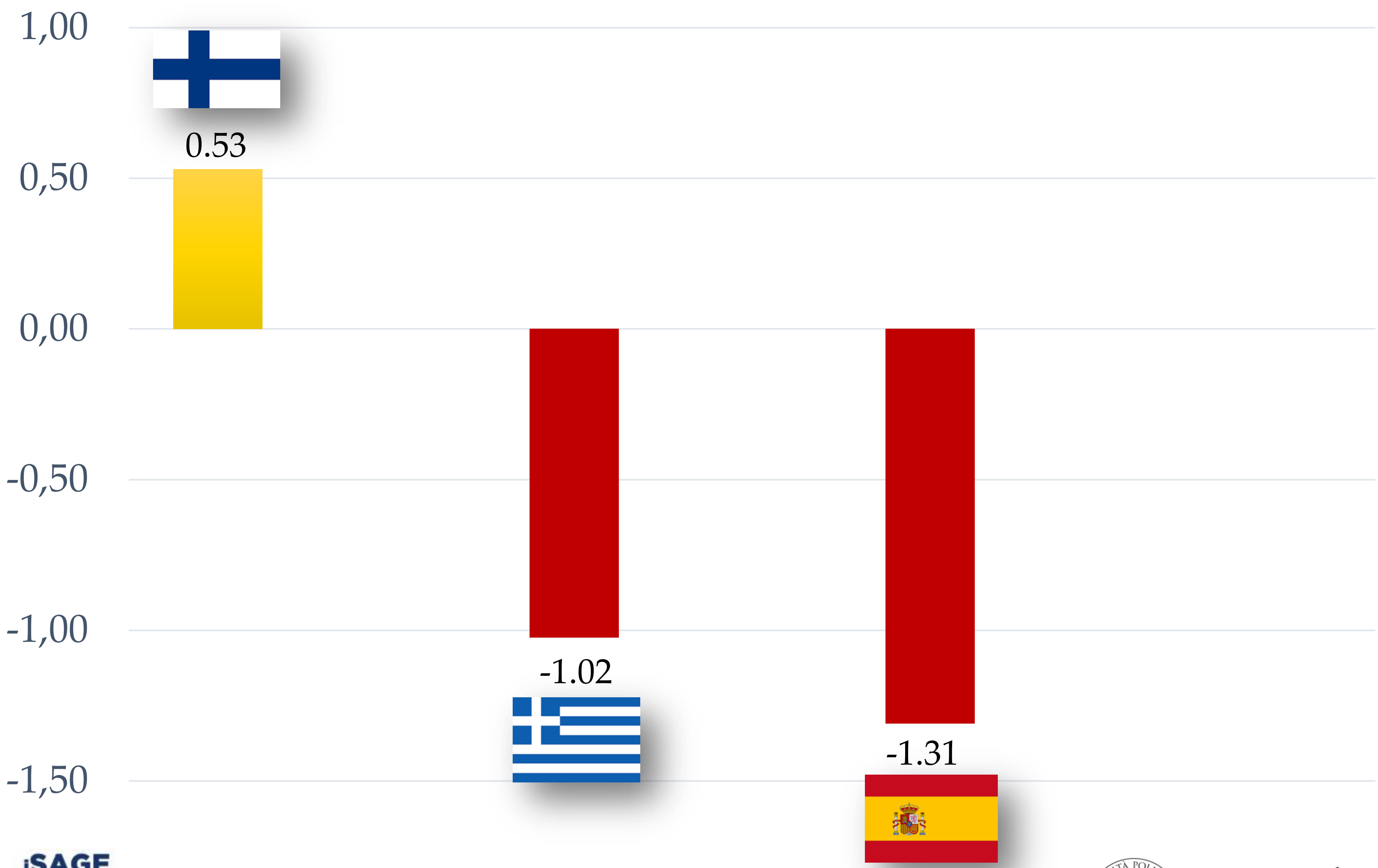
WTP Organic label



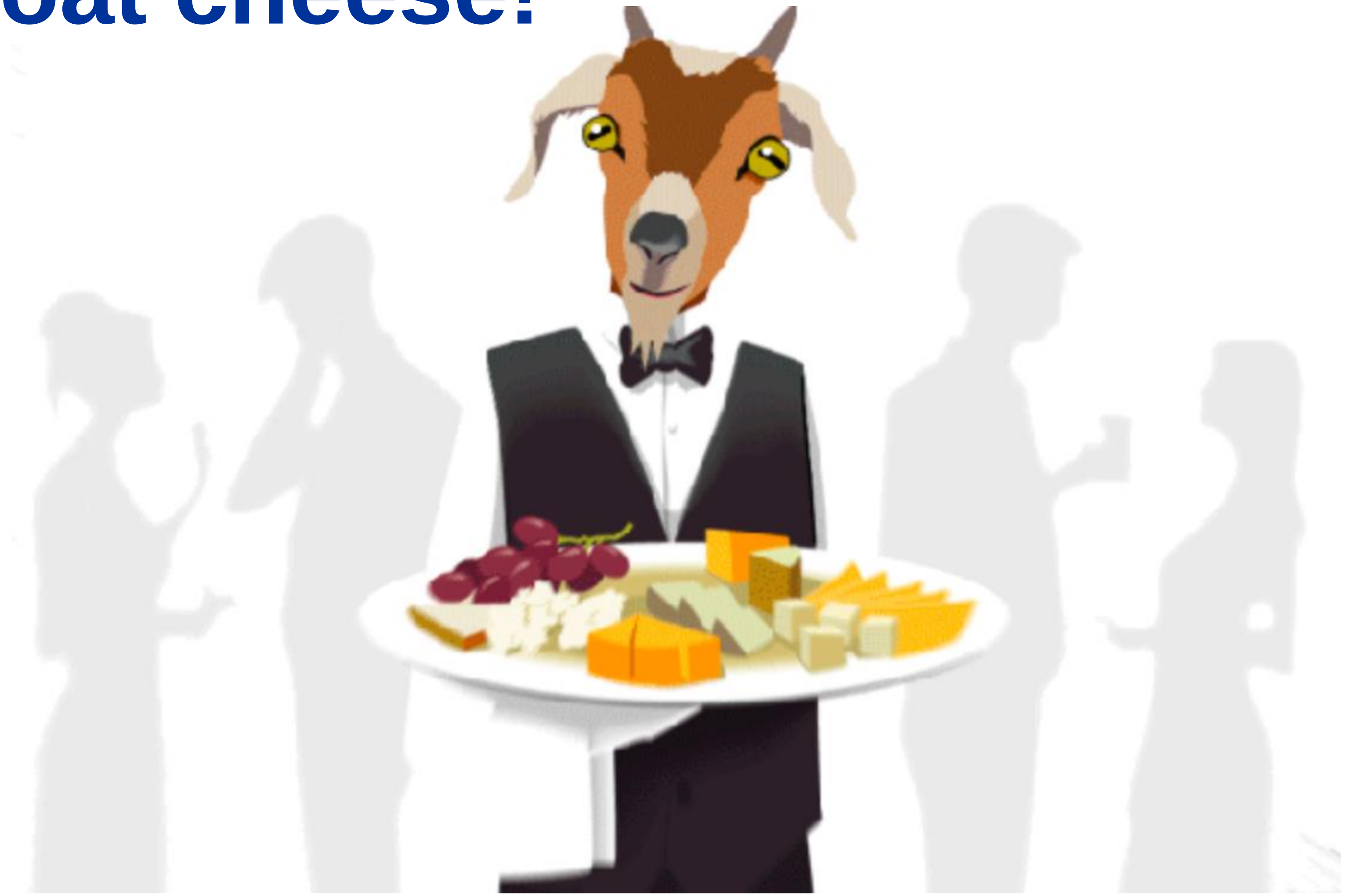
WTP Less fatty

WTP High protein content

WTP Ready to cook



Let’s continue with ewe and goat cheese!



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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	

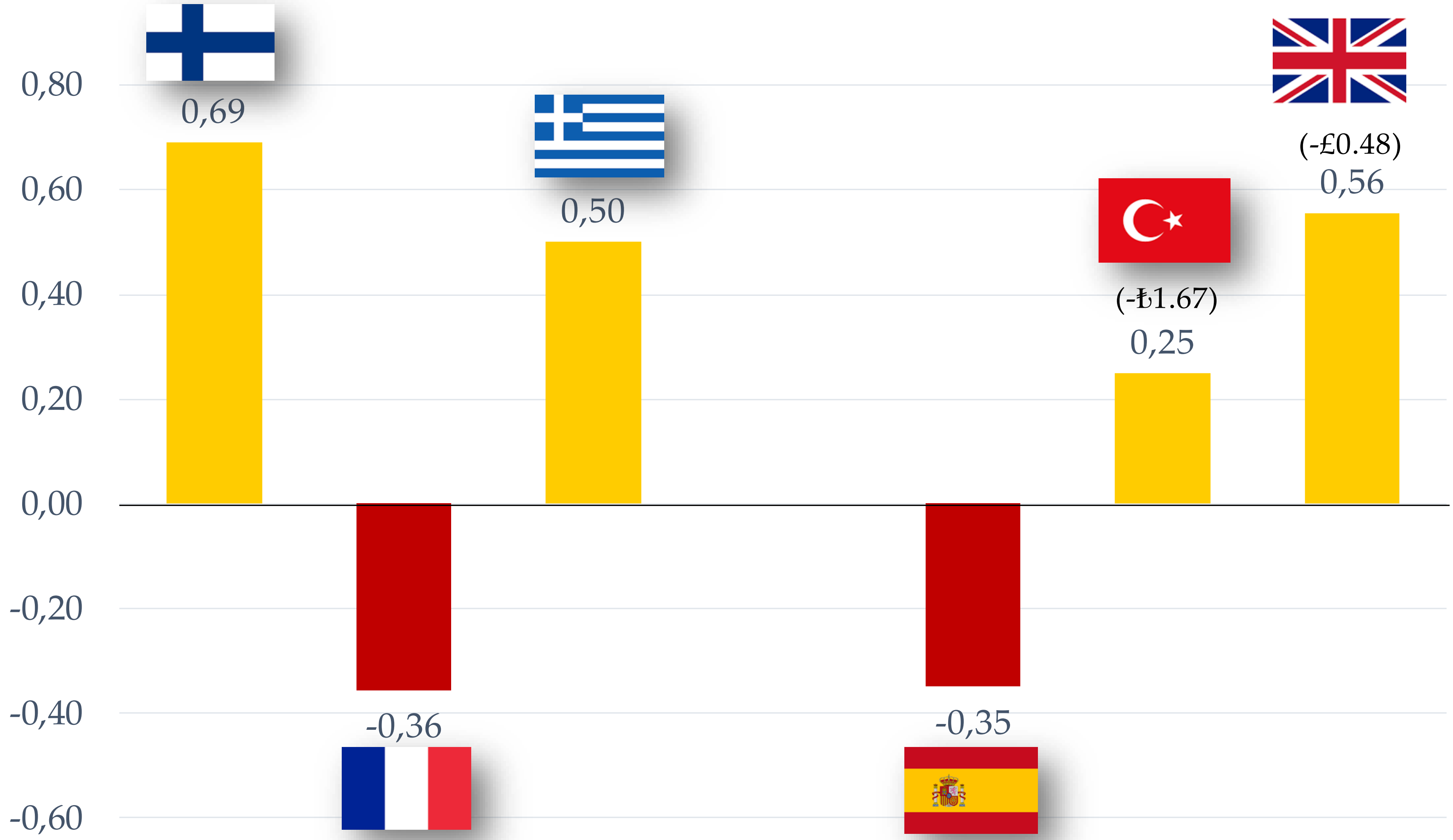
Preliminary results: cheese type

*None is the reference category

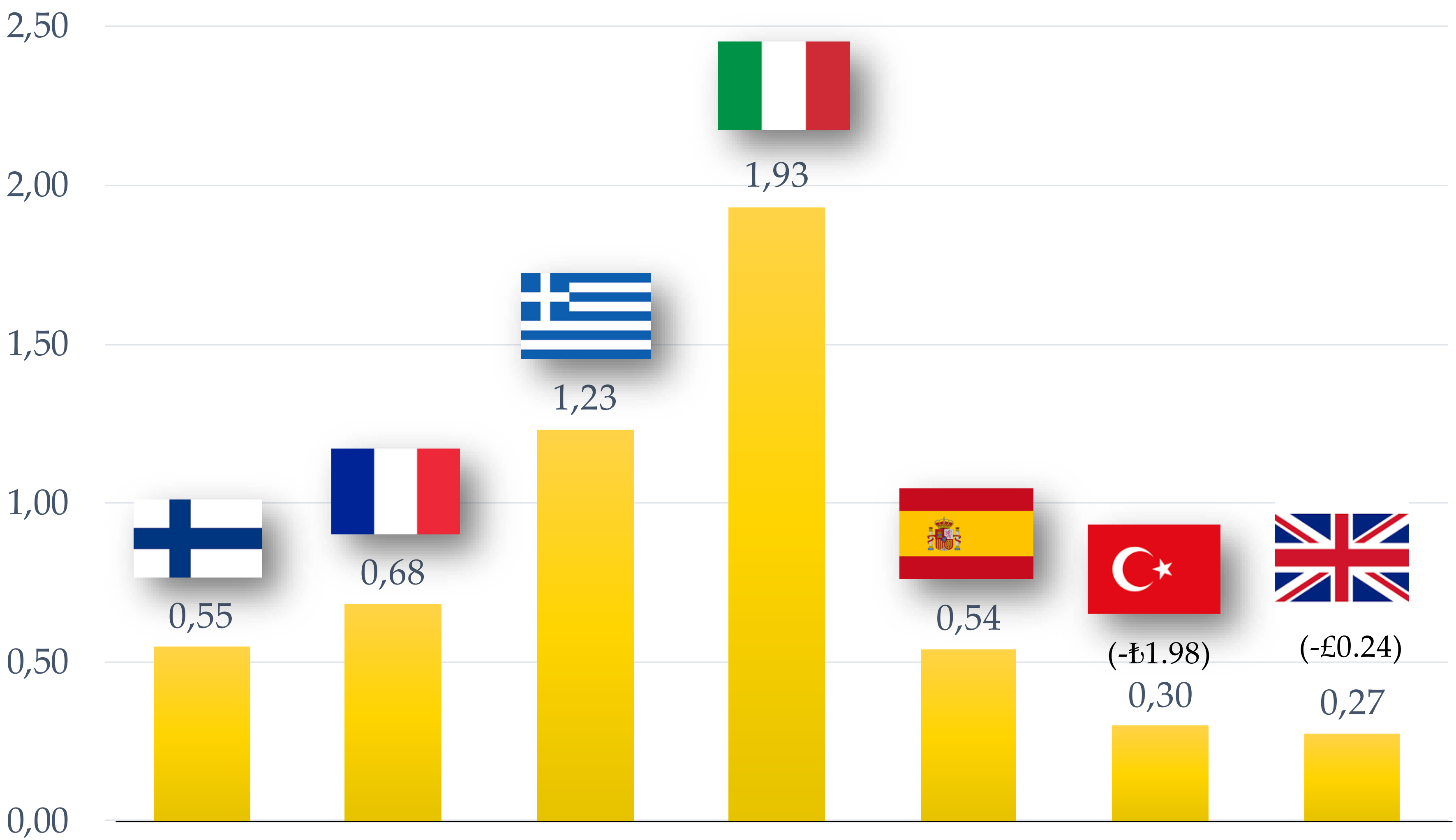
Meat	Finland	France	Greece	Italy	Spain	Turkey	UK
None	–	–	–	–	–	–	–
Aged cheese	↑↑	↑↑	↑	↑	↑↑	↑↑	↑
Fresh cheese	↑	↑	↑↑	↑	↑	↑	↑

5% significance level

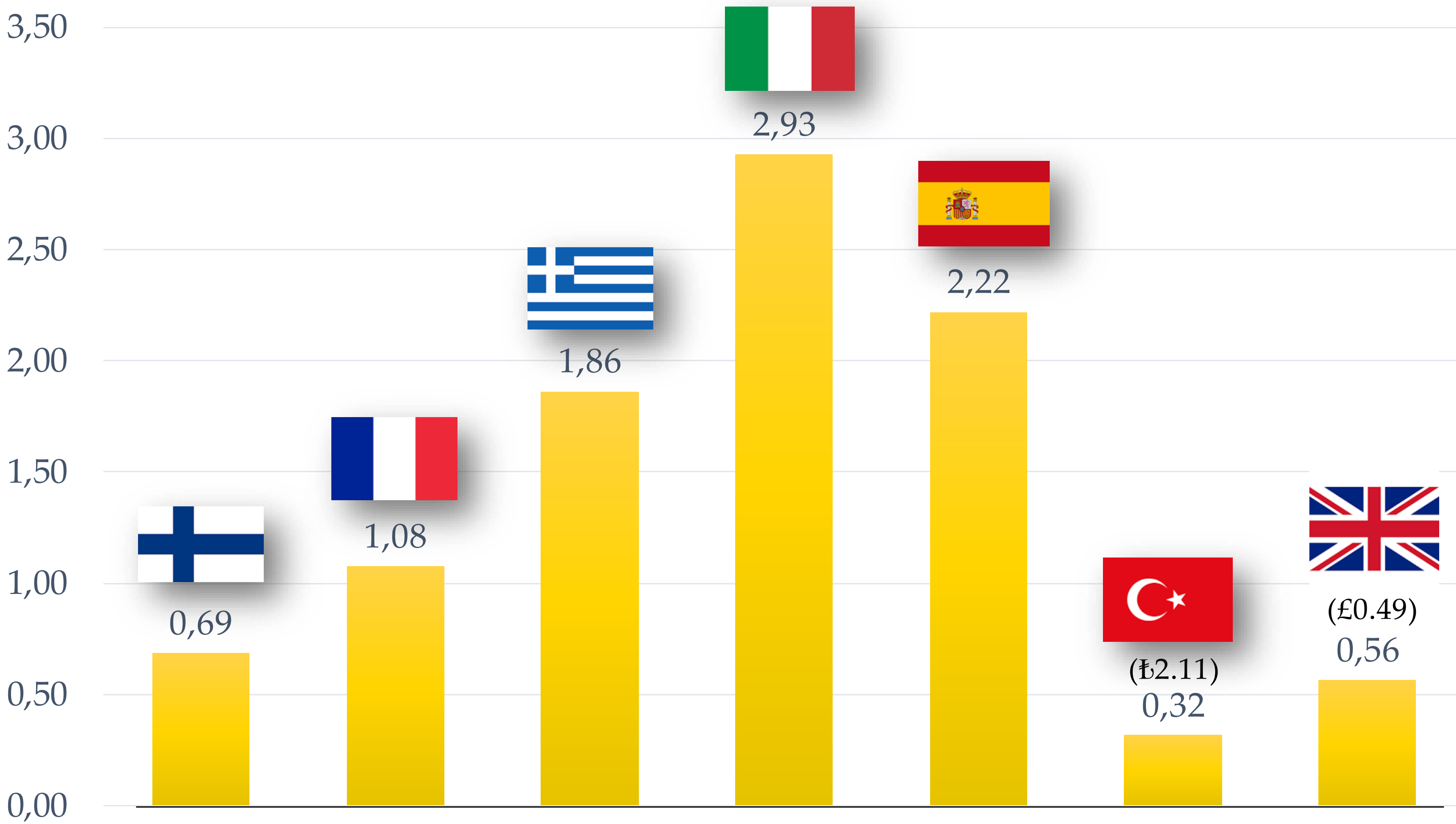
WTP Cow milk



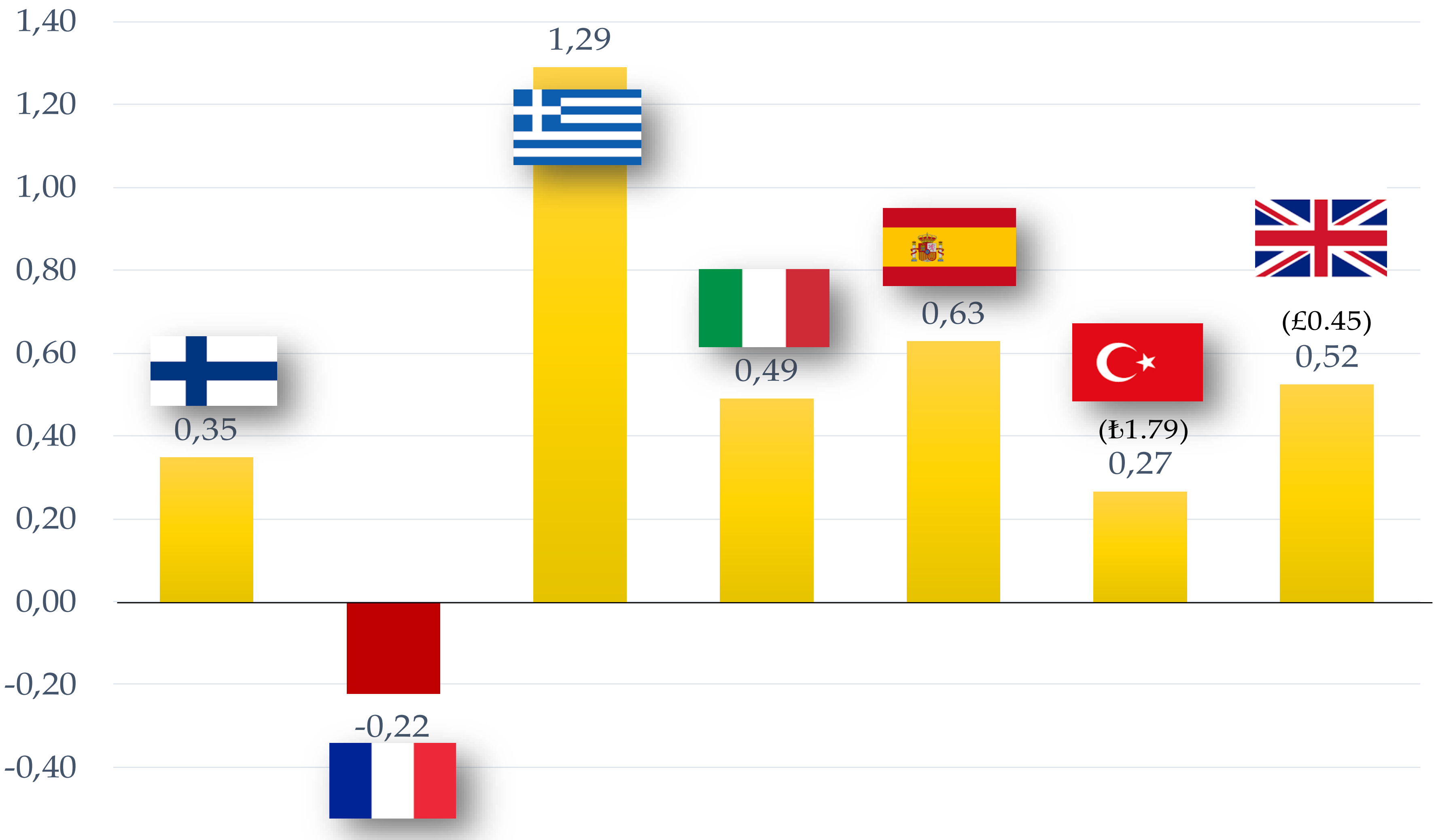
WTP National origin



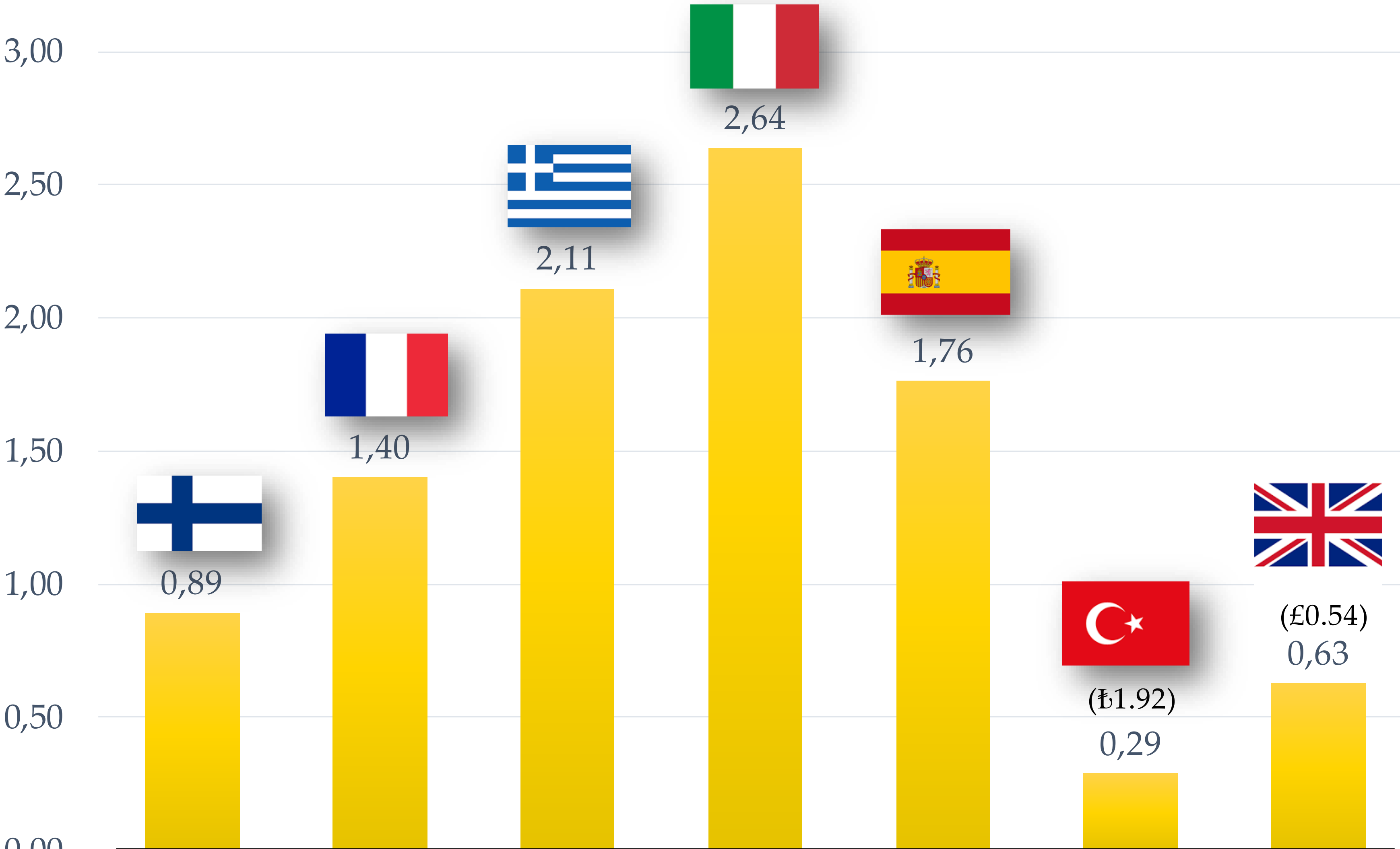
WTP PDO


3,50
3,00
2,50
2,00
1,50
1,00
0,50
0,00
0,69
1,08
1,86
2,93
2,22
(₺2.11)
0,32
(£0.49)
0,56

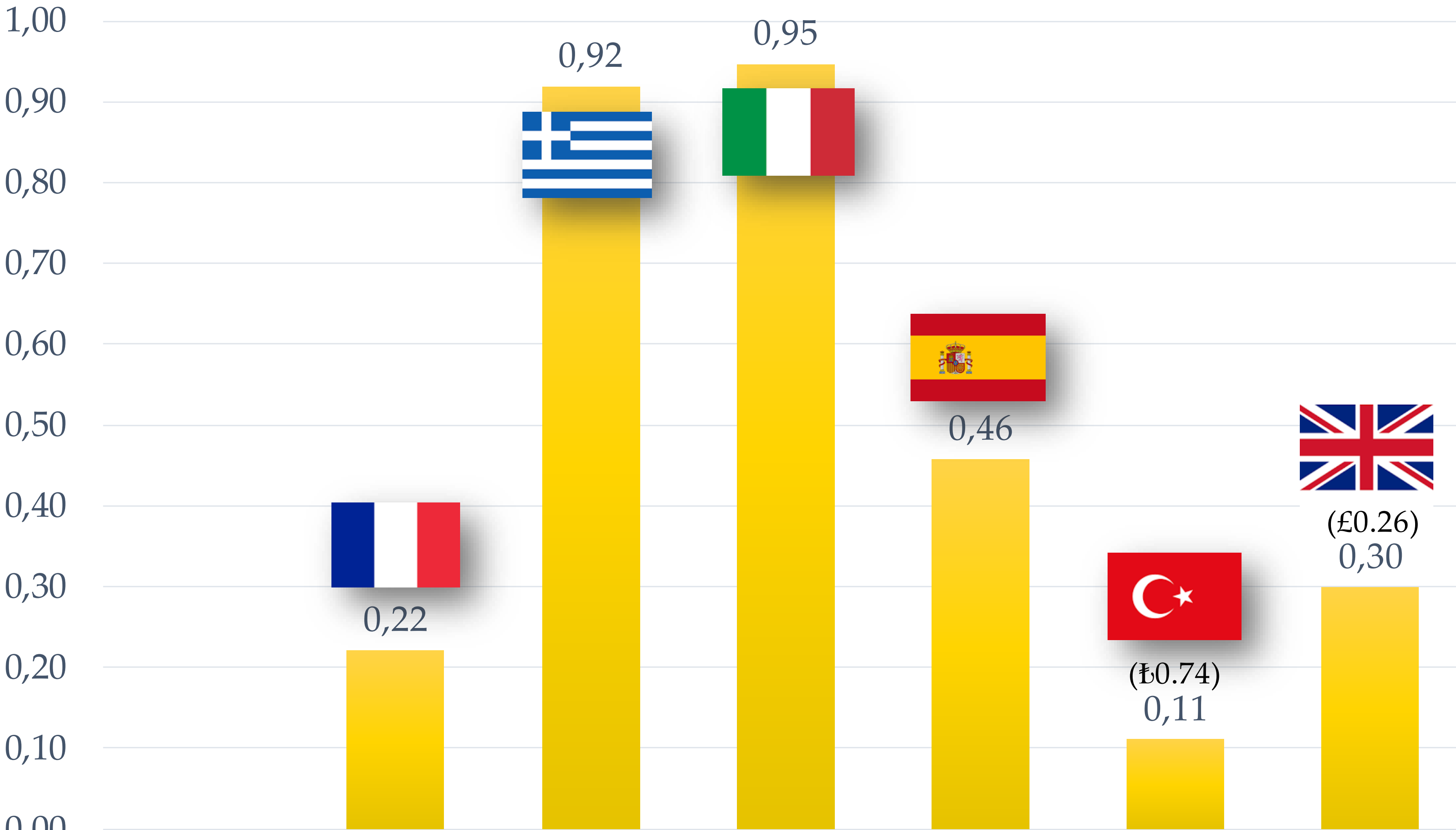
WTP Pasteurization



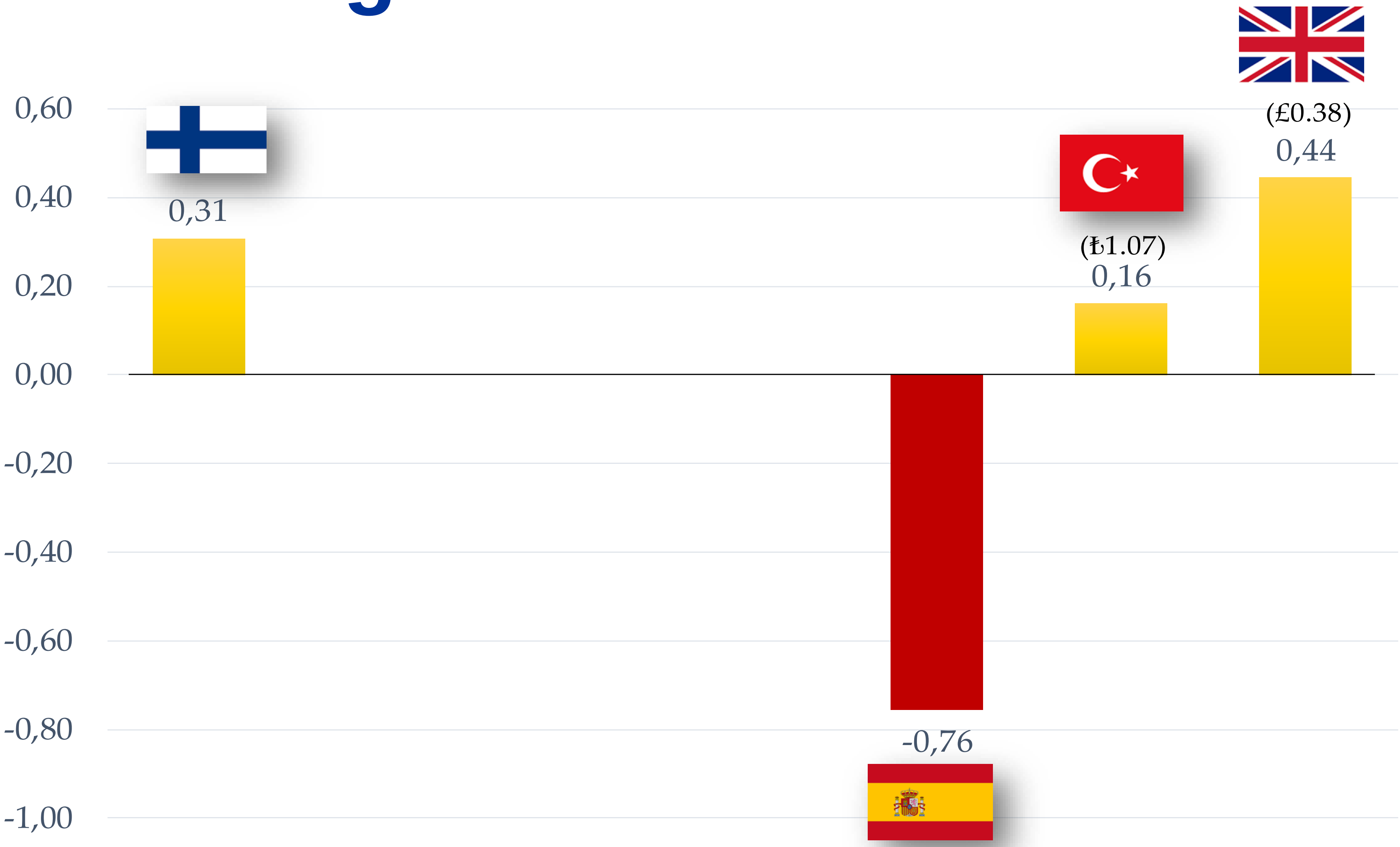
WTP Organic



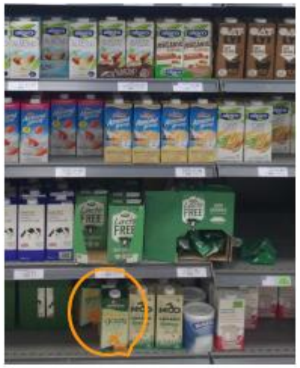
WTP Low salt


1,00
0,90
0,80
0,70
0,60
0,50
0,40
0,30
0,20
0,10
0,00
0,22
0,92
0,95
0,46
(₺0.74)
0,11
(£0.26)
0,30

WTP Vegetable rennet



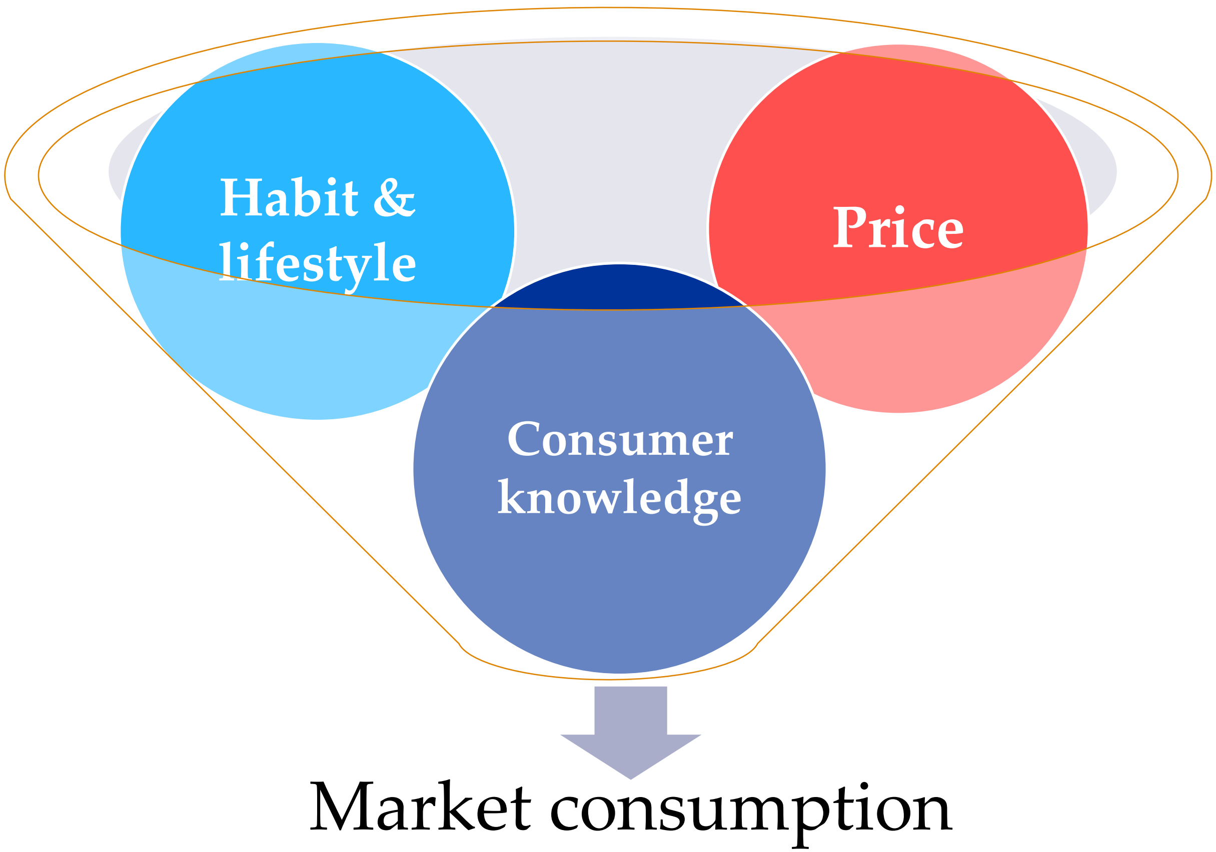
Retailer survey



Method: semi-structured qualitative interviews with retailers

	Meat products			Dairy products		Total interviews
	(SMKT)	(BTCH-RUR)	(BTCH-URB)	(SMKT)	(INDP-RETAIL)	
FI	1	1	1	1	1	5
FR	1	1	1	1	1	5
GR	2	1	2	2	1	8
IT	2	1	1	1	3	8
ES	1	1	1	1	3	7
TR	1	1	1	1	1	5
UK	2	1	1	1	1	6
Total	10	7	8	7	11	**44**

Barriers to higher penetration to the market for sheep & goat meat



Expectations and innovation opportunities for sheep & goat meat

Most retailers interviewed are pessimistic about future sales but some do envisage opportunities:

- Scope for **provenance labelling** and **assurance schemes:**

Label Rouge, PGI (FR)

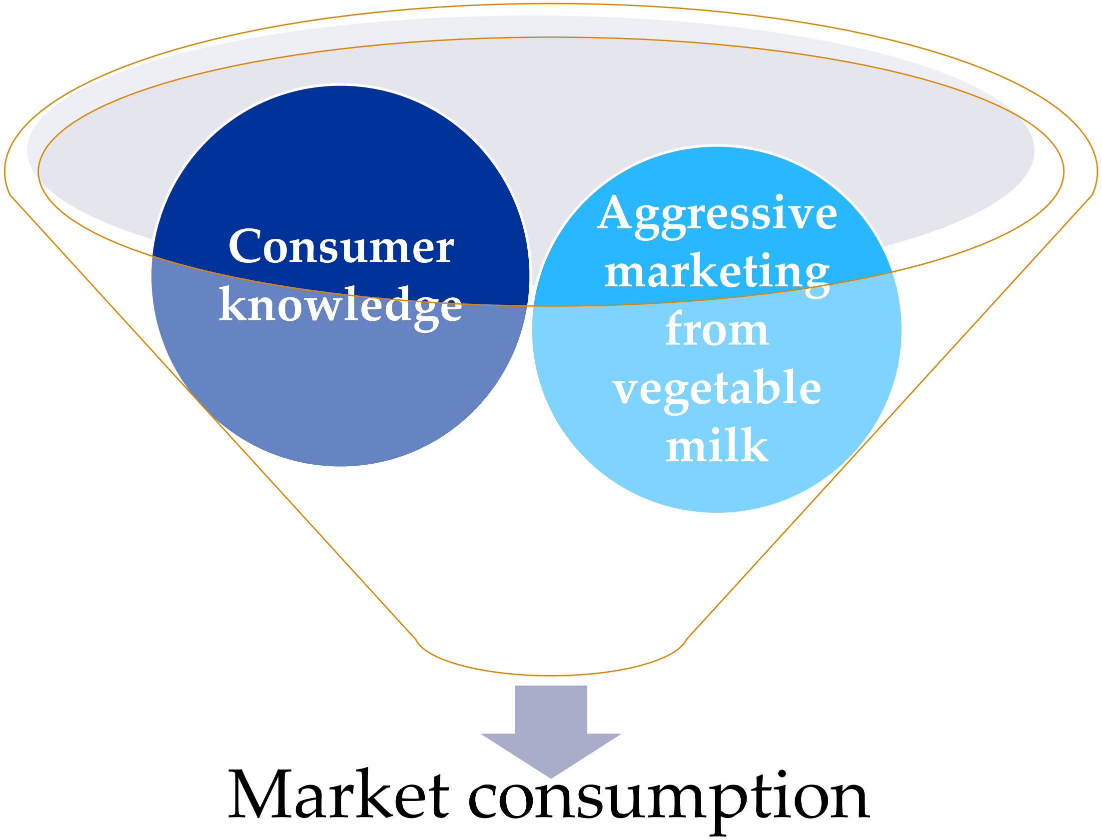
Origin from Lapland (FI)

Red Tractor (UK)

- Focusing on **quick-to-cook** cuts, and **cheaper** cuts e.g. adjoining cuts

- ‘**Tell the whole story**’ to improve consumer knowledge e.g. two successful examples of increased consumption of mutton and goat meat in two butchers in IT and UK

Barriers to higher penetration to the market for sheep & goat dairy products



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PART 2
Identified best practices across the chain: iSAGE recommendations

Survey of multi-actor current best practices in the supply chain

The objectives were to:

1. Investigate **innovative approaches** in the sheep and goat supply chain (SC), and
2. Build a model of ‘**best practices**’ supporting innovation and improvements in SC performance

Method

- **Case studies** based on semi-structured interviews with SC market players and some secondary data collection (e.g. firms webpages)
- Three case studies per country, 22 case studies overall (11 lamb meat; 11 sheep & goat dairy)
- Cases **purposefully sampled** (Yin 1994) including innovative approaches, different products and SC organisations (meat/dairy, commodity/high quality production etc.) **to allow general applicability of results**
- Within and cross-case study analysis for theory building (Glasser & Strauss 1967)

Background concepts used

- The research was mostly inductive to identify what the SCs investigated are doing that is unique
- However, some broad concepts from the SC innovation literature were used for the research protocol and the analysis as references:
- *Continuous innovation* (e.g. Soosay et al 2008)
- *Capabilities development* (e.g. Beske et al 2014)
- *Changes in relations* (van Mierlo et al 2010)
- *Changes in rules* (van Mierlo et al 2010)

Practices examples from the within-case analysis (1)

SC case study examples	Best practices (BP) / failing factors (FF)
A_UK. Tesco ‘cost of production’ contract with 150 farmers (25% of which younger than 35 yrs.), where farm-gate price is based on market price and cost of production collected by an external consultant	•**Strategic sourcing (BP)**: young farmers •**Lean management (BP)**: supply continuity and conformity, (partial) SC consolidation •**Establishment of key learning point (BP)**: cost of production data collection •**Continuous negotiation (BP)**: negotiation about supply volumes (from initial 100% to current 70% compulsory sale to Tesco)
B_GR. FARMA CHALASTRA S.A. is a specialised firm in slaughtering and cutting, selling to supermarkets and foreign customers, supplied by ~ 100 farmers. Investment in cut differentiation (including cold cuts), charcuterie and biogas unit	•**Lean management (BP)**: supply continuity and conformity, (partial) SC consolidation, waste reduction •**Product innovation (BP)**: product differentiation (cold cuts) •**No partnership agreement with retailers (FF)**: focus on operations without a strong commercial strategy, subsequent low return to players upstream of the chain

Practices examples from the within-case analysis (1)

SC case study examples	Best practices (BP) / failing reasons (FailR)
C_FR. SICABA cooperative slaughtering, cutting and marketing to different customers lamb meat (organic, Label Rouge, PGI labelled) supplied by its 228 members and other local farmers	•**Strategic sourcing (BP)**: high quality lamb •**Establishment of key learning point (BP)**: feedback on carcase performance •**Joint planning (BP)**: agreement on the sale schedule with the member farmers •**Product innovation (BP)**: offer of racks as 'lamb fillet in the manner of magret' to handle carcase imbalance •**Market routes differentiation (BP)**: to handle carcase imbalance
D_FI. REKO-ring lamb sale: case of an organic farmer undertaking slaughtering, cutting, direct sale at farm, market town through REKO-ring (pre-booking on Facebook), shops and hypermarket	•**Specialistic knowledge (BP)**: the farmer is the 'knowledge owner' of the slaughtering and cutting operations (he's a Uni degree in Animal Science and attended courses in animal processing) •**Market routes differentiation (BP)**: to handle carcase imbalance by reaching different consumer segments

Best practices pattern matching examples (1)

***Meta-constructs* and best practices with n. of SCs engaged [n.]**	**Contribution to better performance metrics**
Establishment of key learning points	
• Feedback on carcase performance [2]	Product quality
• Data collection on cost of production [1]	Reduction of production costs
Information sharing	
• Implementation of traceability till individual retail cut [6]	Consumer loyalty; Product quality; Reduction of transaction costs

Best practices pattern matching examples (2)

Meta-construct and best practices with n. SCs engaged [n.]	**Contribution to better performance metrics**
Lean supply chain management • 'Piecemeal' approach to lean management [2]	Product quality consistency; Logistics efficiency; SC response time; Waste reduction
Relationship management • Joint planning [8] • Strategic sourcing [7] • Continuous negotiation [6]	Information efficiency; Product availability on shelf; Logistic efficiency; SC response time; Consumer loyalty
Handling carcass imbalance • Market route differentiation [10] • Product innovation [5] • Trade (export/import) [8]	Consumer satisfaction; Product availability on shelf; Waste reduction

Propositions for successful innovation in lamb meat SCs based on patterns of best practices

1. Knowledge management practices such as establishment of key learning points and information sharing facilitate operations, long-term relations and innovation
2. Innovation entailing operation efficiency requires a ‘piecemeal’ approach to lean management and relationship management
3. Product innovation to succeed requires strategic planning and relationship management
4. SC operators are required to seek continuous innovation and new end markets to handle production / sale imbalance problems

Contact: zanoli@agrecon.univpm.it