SESSION 3
Consumer Survey

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Consumers' Hedonist Preferences Towards Typical Food Products in France, Germany and Spain

G. Giraud ENITA Clermont

with help of A. Lebecque, J.N. Serra, C. Amblard, L.M. Albisu, A.I. Sanjuan, H. Resano, U. Enneking, U. Fischer, M. Petzoldt, I. Trigui, A. Letort

Recruitment of Panellists

FRANCE

7 Champion supermarkets Auvergne:
4 /dry-cured ham, 6 /wine
2 urban supermarkets, 2 sub-urban, 3 rural
Dry-cured ham: 612 customers 78 final panellists
Wine: 382 customers 67 final panellists

GERMANY (only red wine)

Own panel during 6 months
Two regions: Saarland/Pfalz (producing area), Bavaria (outside production area)
2215 interviewees 259 final panellists

SPAIN (only dry-cured ham)

Two Carrefour hypermarkets in Zaragoza
5640 customers 216 final panellists

197

Experimental design of consumer survey expected /**realised**

	Spain	France	Germany	Nb panellists
Red wine		400 / **382**	400 / **253**	800 / **635**
Dry-cured ham	400 / **5640**	400 / **612**		800 / **6252**
Nb panellists	400 / **5640**	800 / **994**	400 / **253**	1600 / **6887**

Expected /**actual** decrease nb panellists /succession stages

	Spain	France		Germany
Stage	**Ham**	**Ham**	**Wine**	**Wine**
Purchase recording	400 / **5640**	400 / **612**	400 / **382**	400 / **254**
Hedonist test 1	200 / **247**	200 / **87**	200 / **73**	200 / **222**
Conjoint analysis	100 / **216**	100 / **78**	100 / **67**	100 / **259**

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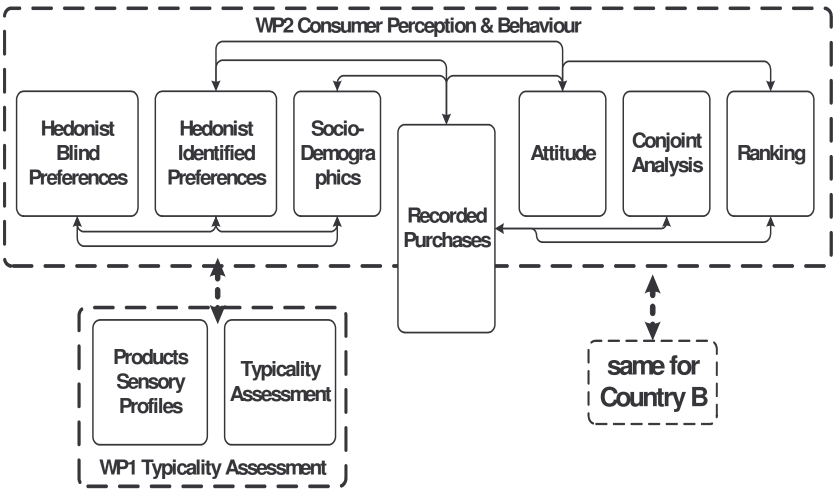
Several potential explanations of purchasing behaviour



WP1: Assessment of the organoleptic properties of typical food products

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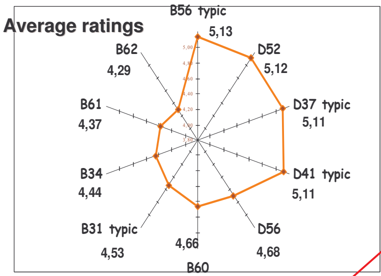
Wine blind test France



Apart B56, French consumers prefer German Dornfelder Rheinberg-Kellerei.

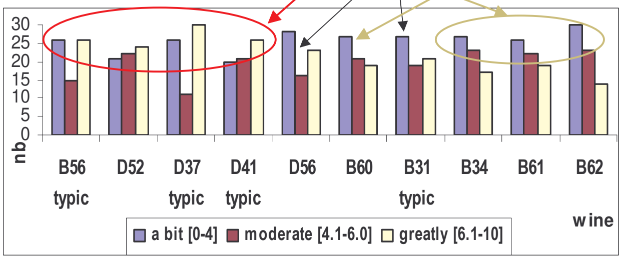
They appreciate also 3 up to 4 typical wines: Beaujolais-village domaine des Nugues, Dornfelder Deutsches Weintor, Bürklin Wolf

Distribution 3 classes appreciation:

B56,D52,D37,D41 most preferred by consumers

D56,B31 ratings divided in 2 opposite groups

B60, B34, B61, B62 not well appreciated



Distribution of panel's ratings

Wine blind test France

4 groups of consumers:

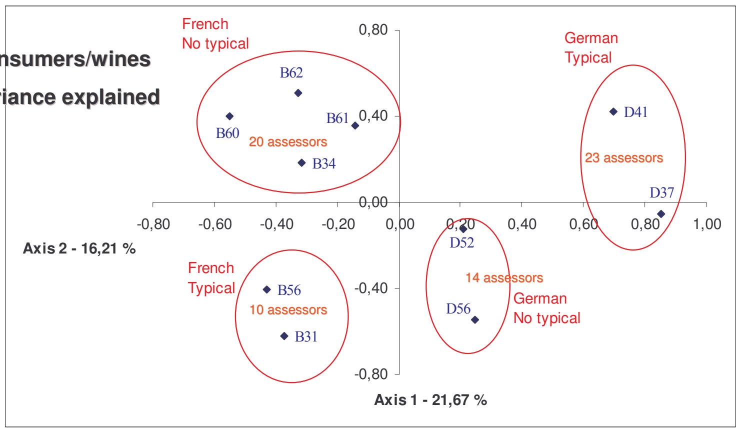
axis 1: French vs German wines

axis 2: Typical vs non typical for French wines

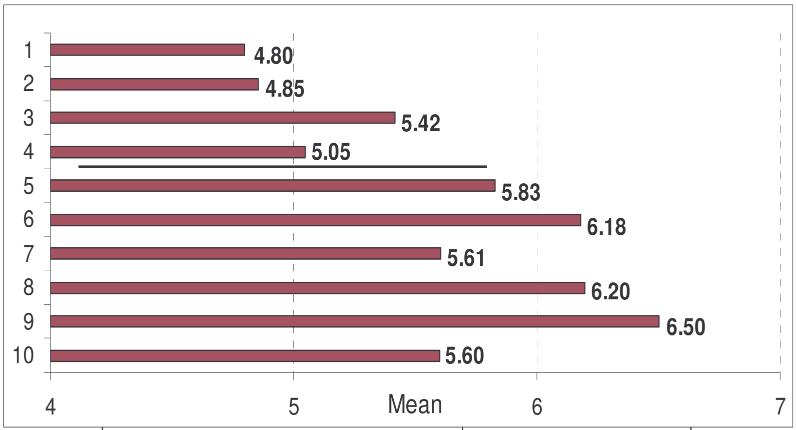
the largest group appreciates typicality of some German Dornfelder

PCA consumers/wines

39% variance explained



Hedonist rating blind test Germany wine



1 = Chateau de l´Eclair 2002	**6 = Dt. Weintor 2003**
2 = Le Pere la Grolle 2002	7 = St. Gisbertus 2002
3 = Domaine des Nugues 2002	**8 = Rheinberg 2003**
4 = Beaujolais Villages Champion 2002	**9 = Mussler 2003**
5 = Dt. Weintor 2002	10= Bottwartal 2003

Ham blind test France

Average rating

		blind rating
Aoste	F20	**6.20**
Champion	F18	**6.04**
Teruel DO	S16 typical	**6.03**
Bayonne RdF	F17	**5.75**
Auvergne	F15 typical	**5.57**
Serrano	S21	5.41
Dry-cured ham	F19	5.40
Aveyron	F16 typical	**4.98**
Iberian nuestra	S18	**4.38**
Iberian lazo	S19 typical	4.28

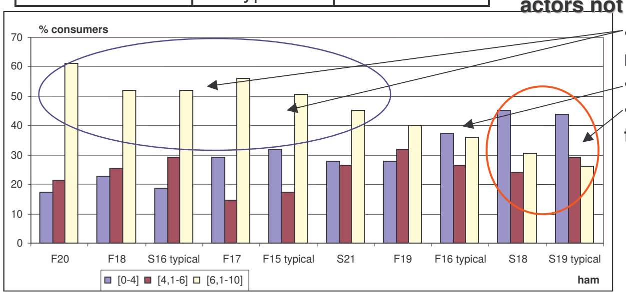
Particularly appreciated F20, F18, S16, F17

Iberian appreciated by 30% French consumers but rejected by other

Hams particularly appreciated include regional, Spanish DO, and commercial or distributor brands

Typicality established by food chain actors not a criteria preference:

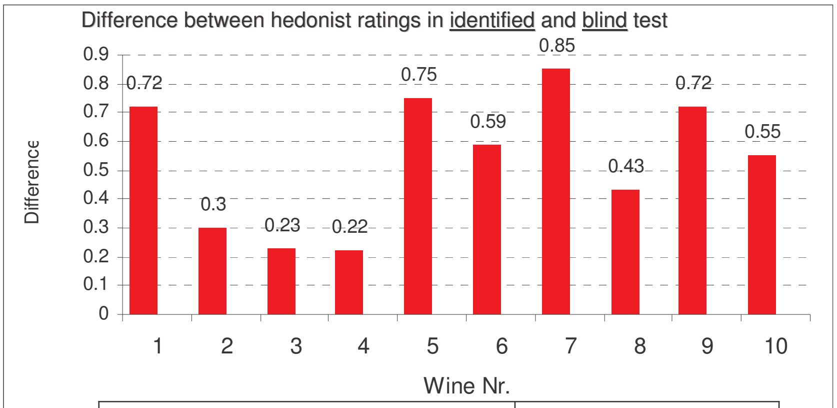
- **S16,F15 preferred by most of consumers**
- **F16 divided appreciation**
- **S19 mainly rejected, due to a specific taste**



Class of notation:

Distribution of ratings

Effect of information on preference, Germany wine



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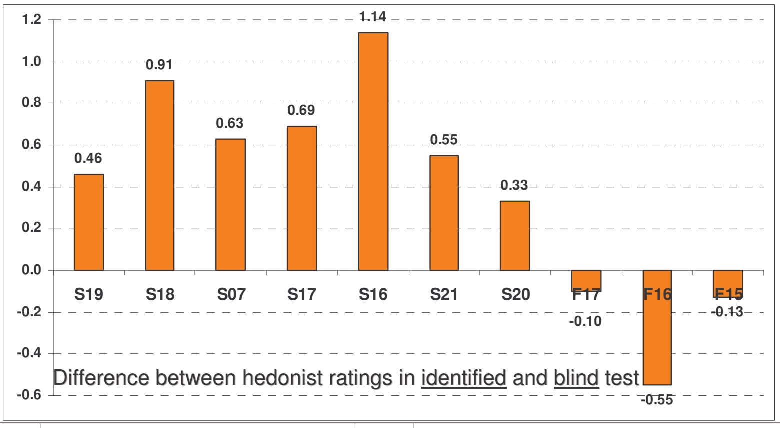
Effect of information on preference, Spain ham



S19	Lazo Iberian, Huelva DO	S21	Granadul STG Serrano
S18	De Nuestra Tierra Huelva, no DO	S20	Carrefour
S07	Navidul 4 Estaciones no DO	F17	Reflets de France Bayonne, Label Rouge
S17	Ribera del Jiloca Teruel, no DO	F16	Couderc Aveyron, no DO
S16	Alto Mijares Teruel DO	F15	Thoumieux Auvergne, no DO

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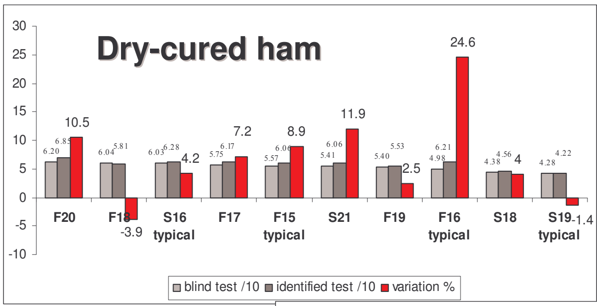
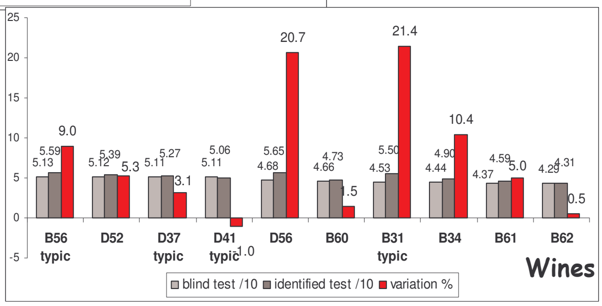
Effect of information on preference, France



F16 Château l'Éclair
S21 Granadul Serrano
F20 Aoste
F15 Thoumieux Auvergne
F18 Champion



B31 Château l'Éclair
D56 Saint Gisbertus
B34 Père la Grolle
B56 BV Domaine Nugues

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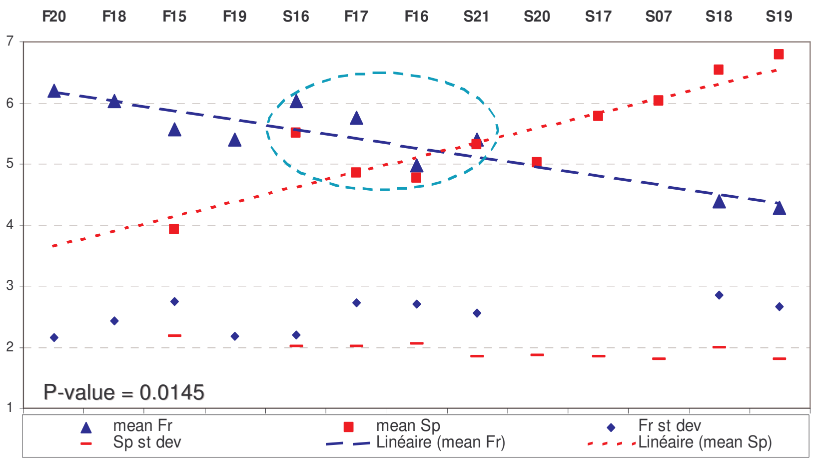
Effect of familiarity with product on blind preferences of French & Spanish consumers, ham



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Conclusion

- **Red wine**
  Consumers appreciate typicality
- **Dry-cured ham**
  Consumers appreciate sensory traits
- **Effect of familiarity** (in each category)
  Local origin, strong and distributor brands
  Variety seeking & open taste for some consumers
- **Effect of information**
  Positive impact on preferences
  Increased dispersion of individual ratings
  Effect of origin intensified
  Confirmation of a segment of curious consumers

enita Clermont

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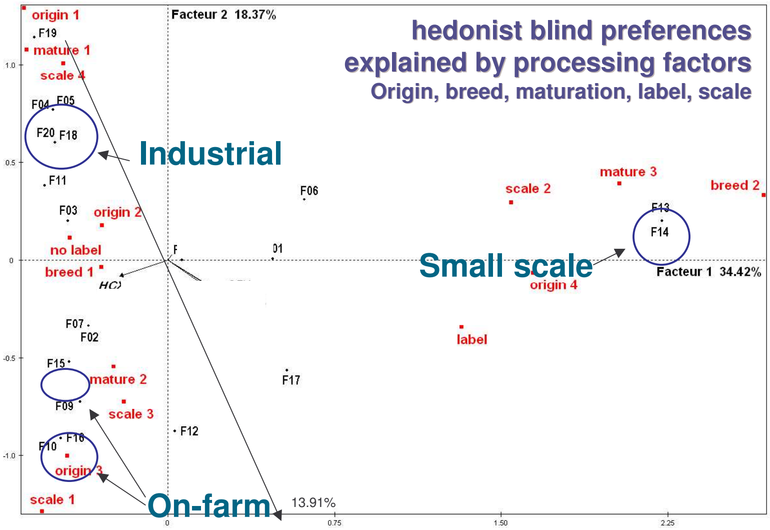
French hams, types of production

multifactorial analysis



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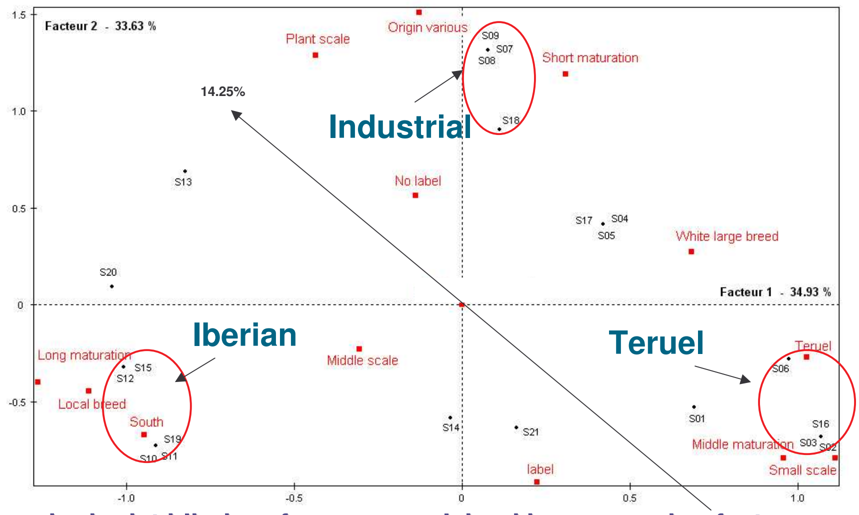
Spanish hams, types of production

multifactorial analysis



hedonist blind preferences explained by processing factors

Origin, breed, maturation, label, scale

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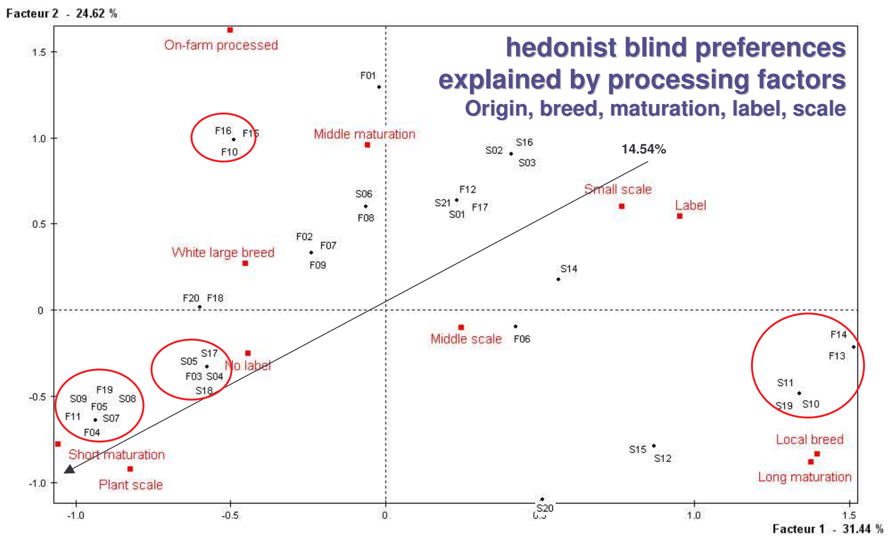
Overall multifactorial analysis Fr + Sp



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Consumers Attitudes and Price / Preference Trade-off

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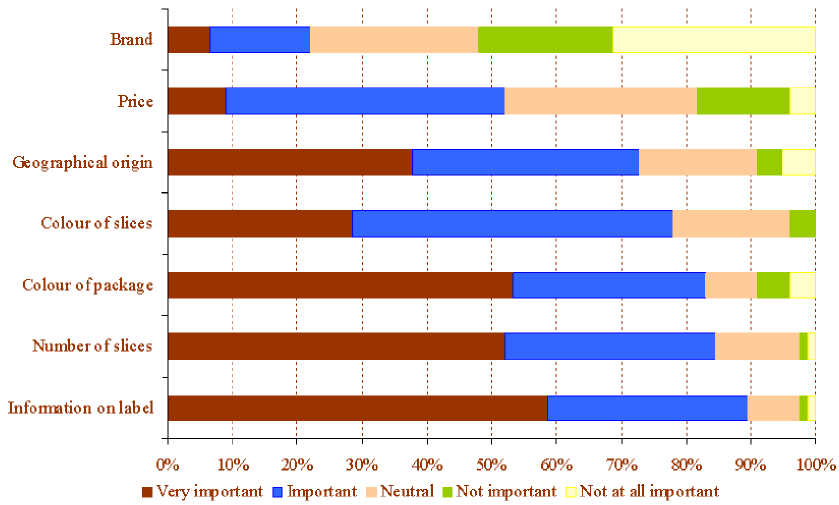
1. Knowledge, perception and attitudes towards PDOs

Cured ham survey	Number of Consumers
1. France	81
2. Spain	216

Red wine survey	Number of Consumers
1. France	66
2. Germany	194

Importance of attributes for the purchase decision Cured ham

• France



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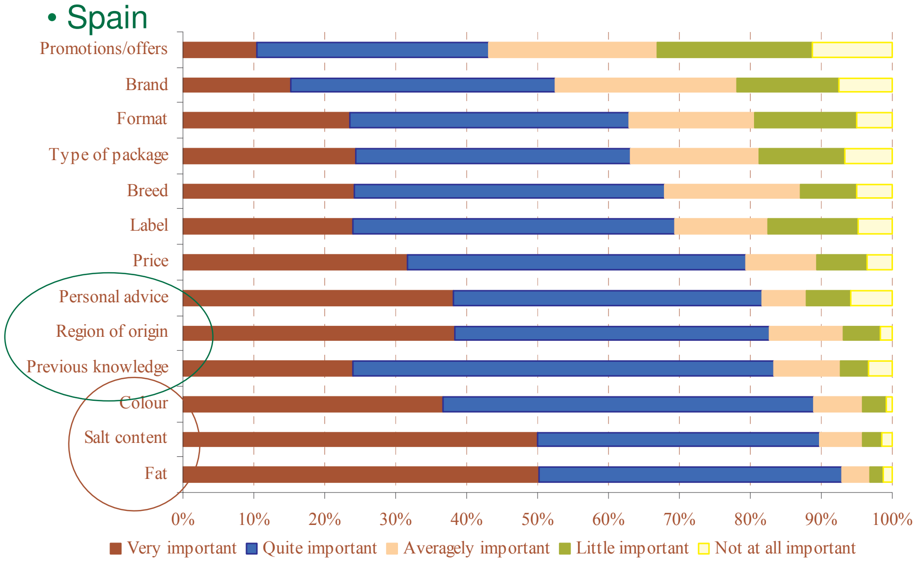
Importance of attributes for the purchase decision Cured ham

• Spain



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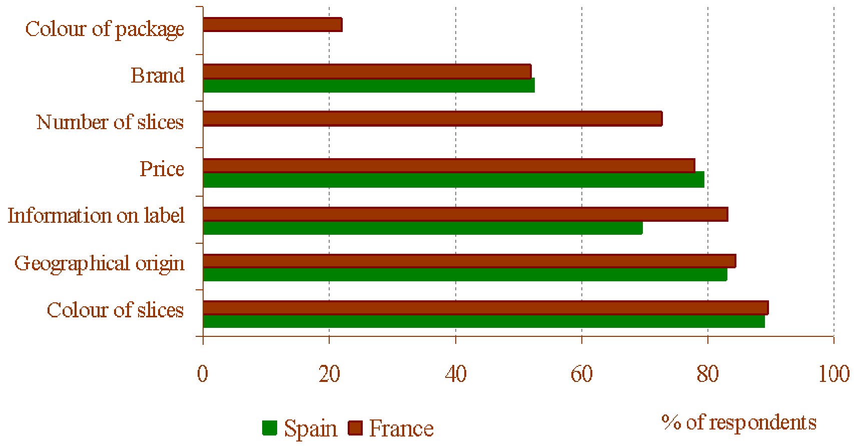
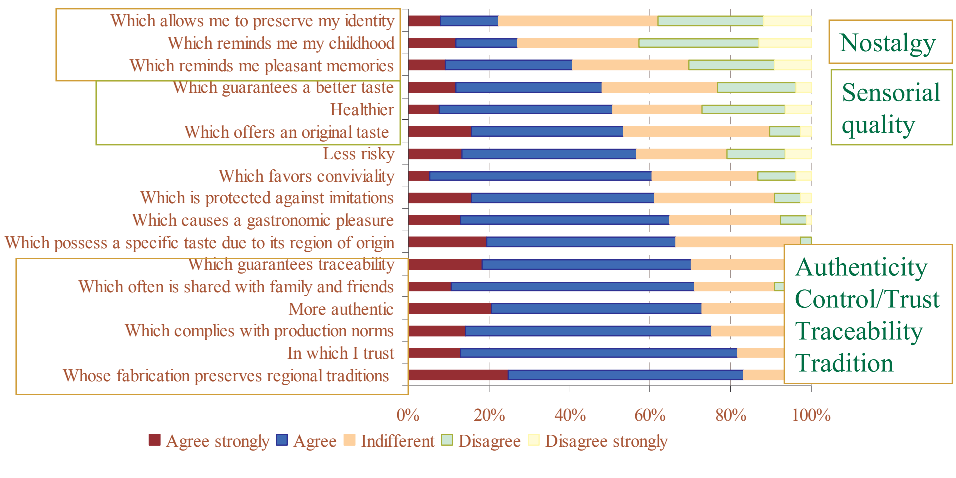
Importance of attributes for the purchase decision Cured ham

Comparison across countries



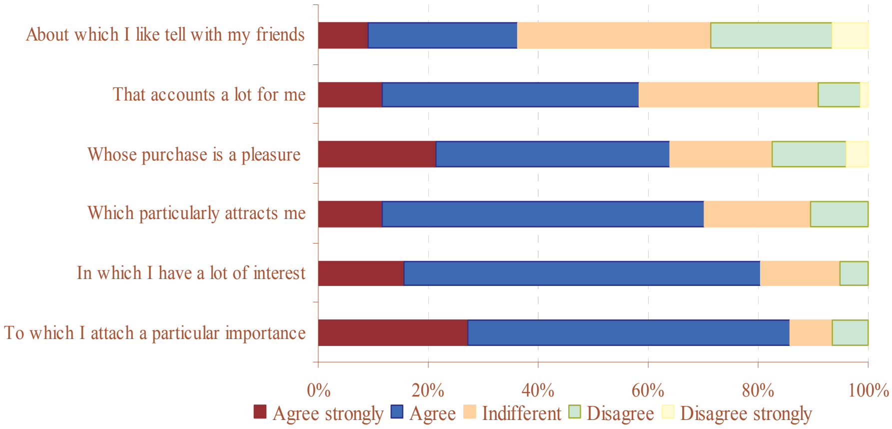
A ham with DO in comparison to a ham without DO is... Cured ham

• France



A ham with DO in comparison to a ham without DO is... Cured ham

- France: Food involvement



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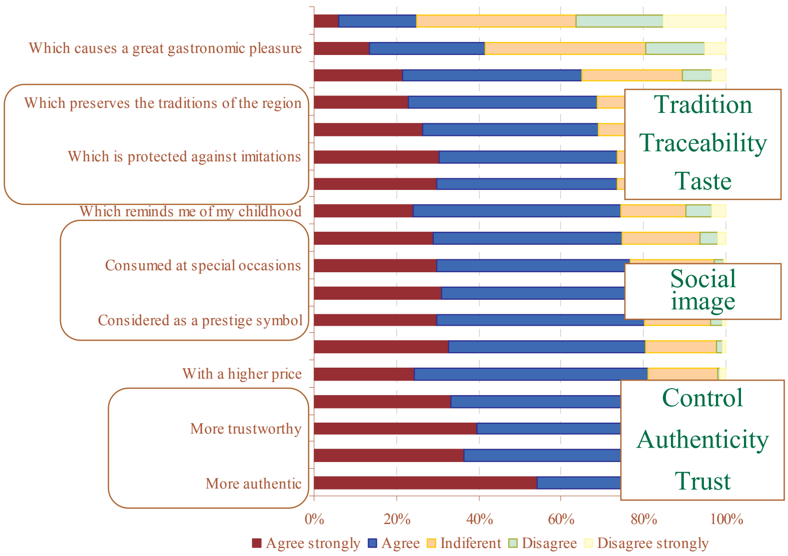
A ham with DO in comparison to a ham without DO is... Cured ham

- Spain



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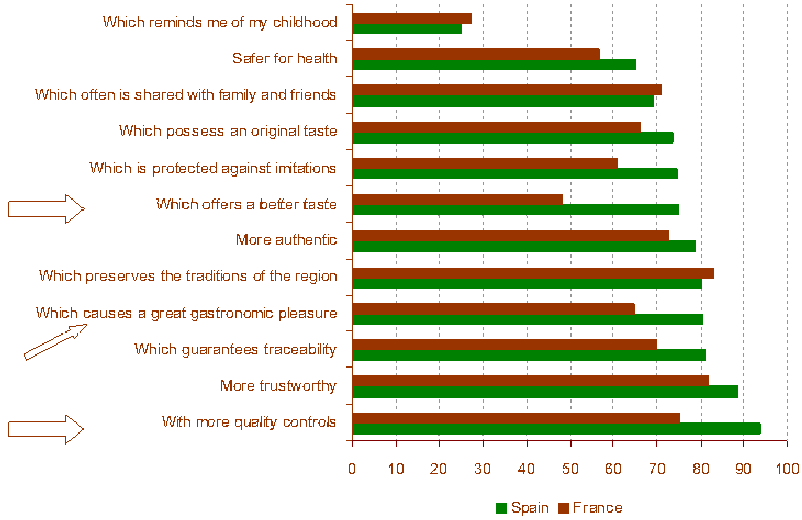
A ham with DO in comparison to a ham without DO is...

Cured ham

• Comparison across countries: % of respondents who agree



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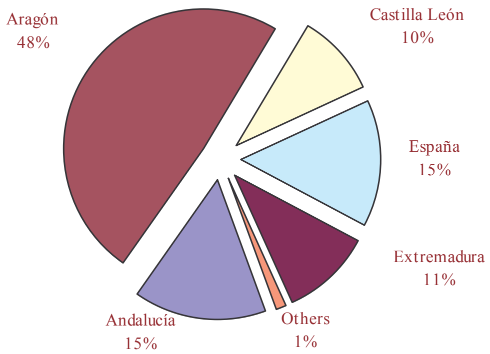
Preference for specific Spanish regions

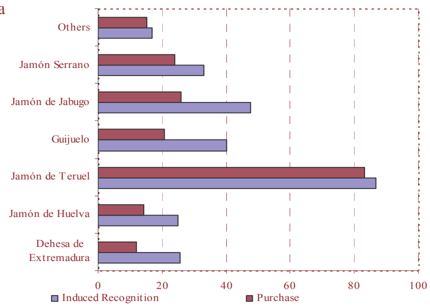
Cured ham



Spain: 86% of consumers show a preference for specific origins, and half of them for the region where they live

16 % spontaneous recognition

52% spontaneous recognition



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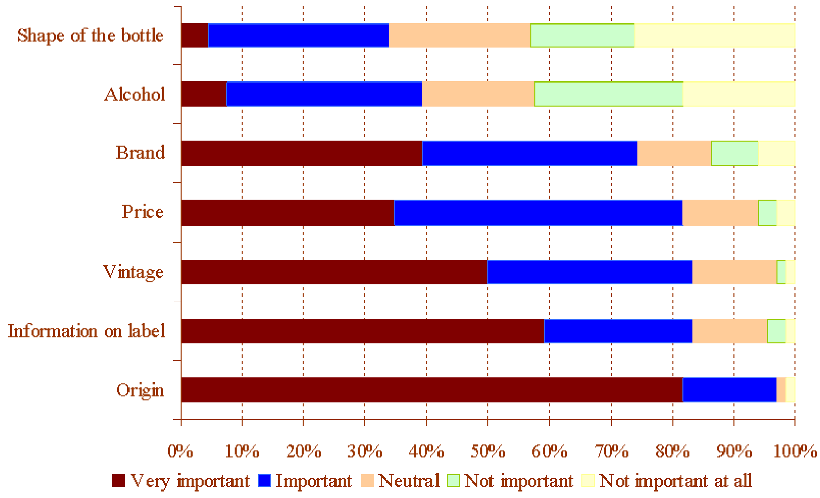
Importance of attributes for the purchase decision Red wine

- France



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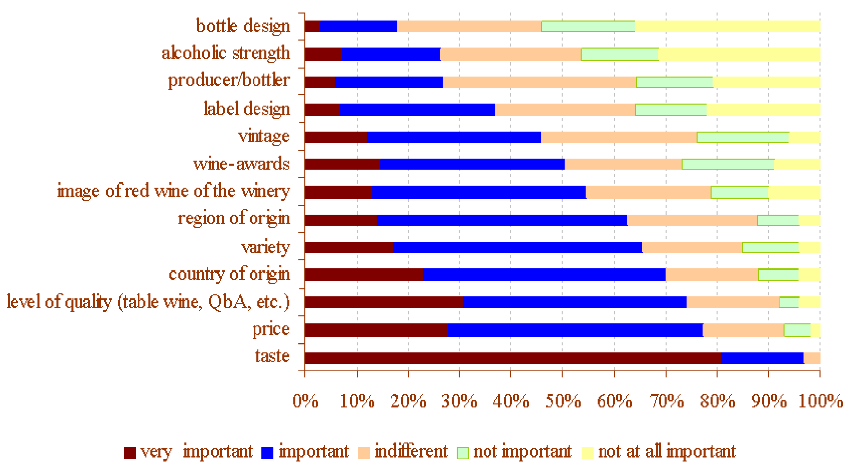
Importance of attributes for the purchase decision Red wine

- Germany



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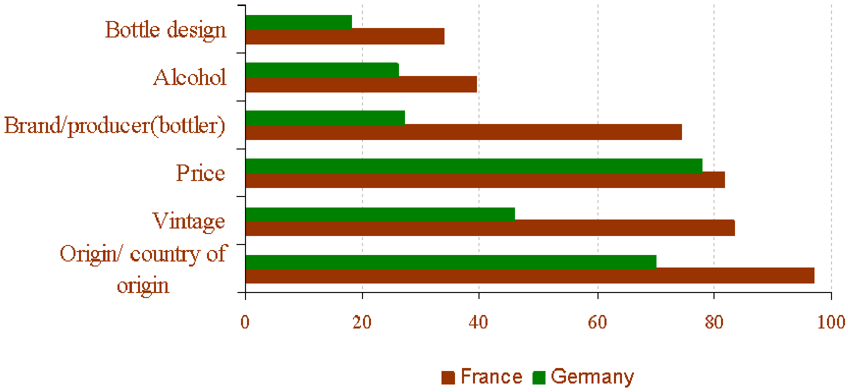
Importance of attributes for the purchase decision

Red wine

- Comparison across countries



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Knowledge of origin labelled wines in France

Red wine

- 22% of consumers quoted a labelled wine
- 75% of respondents buy food labelled products
- 66% of consumers know brands of Beaujolais wine

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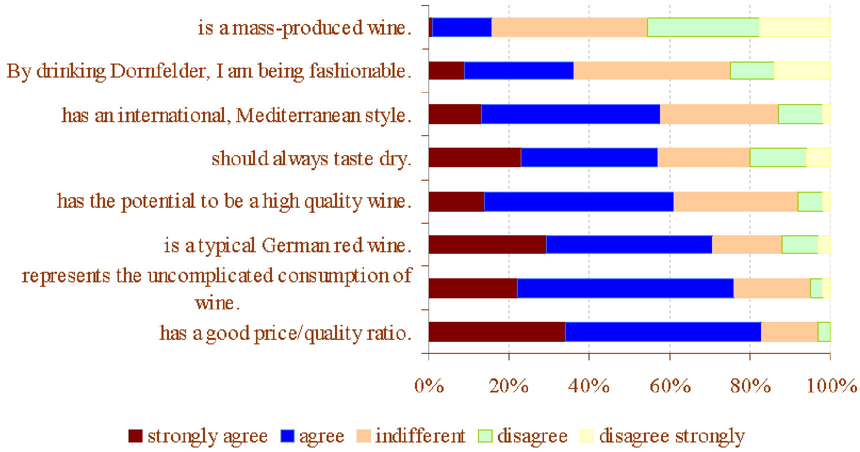
Attitudes towards Dornfelder in Germany

Red wine

•Dornfelder wine....



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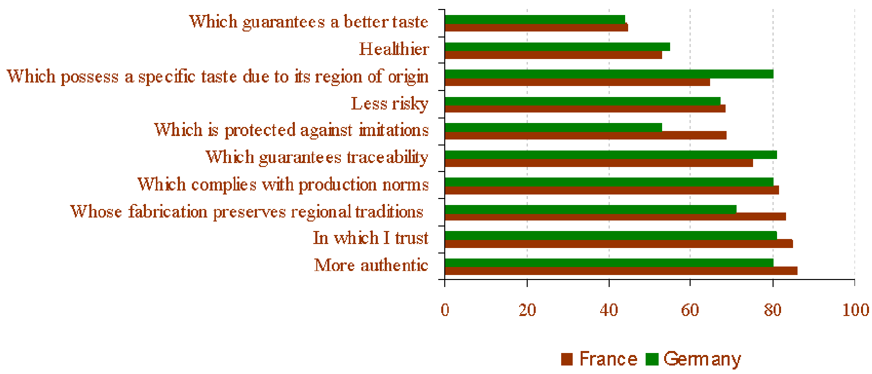
A product with an origin label is a product...

Red wine

• Comparison across countries (% of respondents who agree)



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Design Price / preference trade-off

Cured ham

	Origin/ Brand / DO							
Set	FRANCE	SPAIN	Weight of package	Number Packages	Total quantity	Total value	Price €/100g	Price €/kg
A	Bayonne, Reflects de France	Spain, Carrefour	100 gr	3	300 gr	6 €	2 €	20 €
B	Auvergne, Thoumieux	Teruel, Alto Mijares DO	100 gr	2	200 gr	6 €	3 €	30 €
C	Teruel, Alto Mijares	Auvergne	100 gr	1	100 gr	6 €	6 €	60 €

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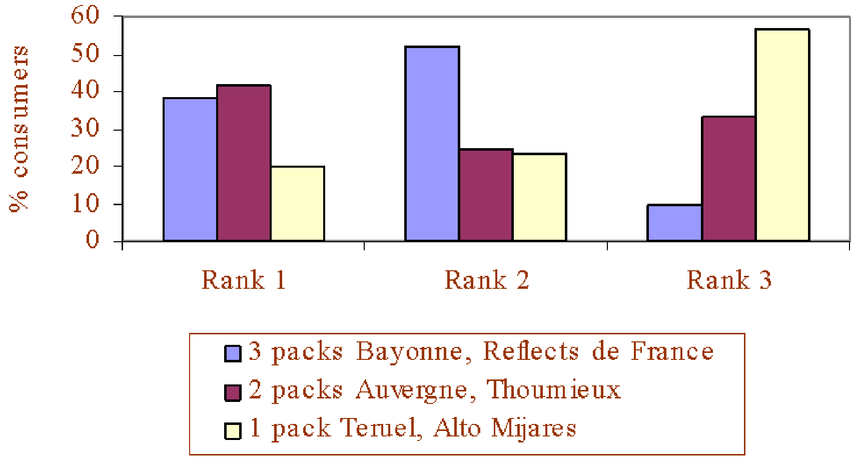
Results of Price / preference trade-off

Cured ham

- France



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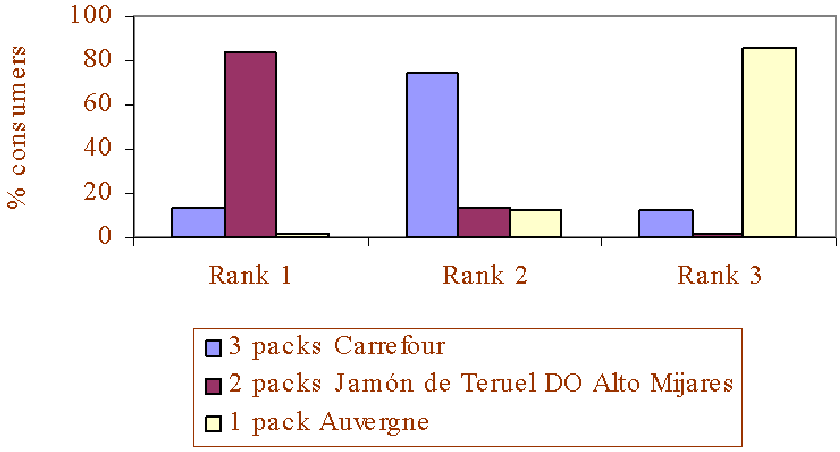
Results Price / preference trade-off

Cured ham

• Spain



Design of Price / preference trade-off

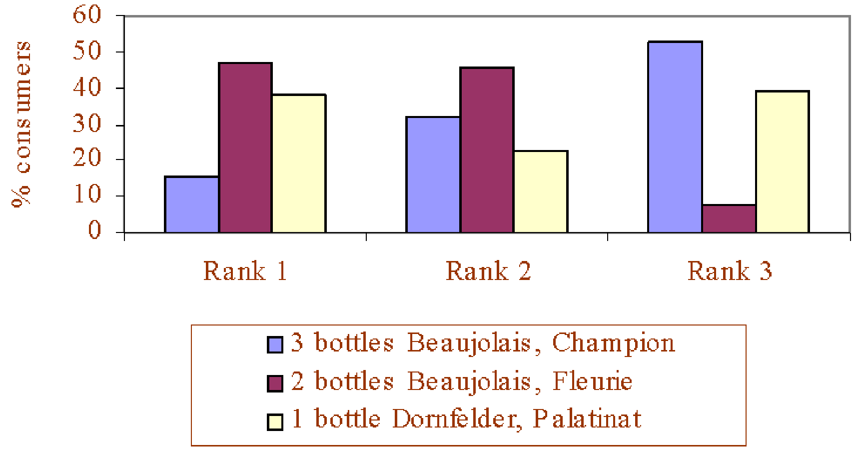
Red wine

Set	FRANCE	GERMANY	Number bottles	Total value	Price €/bottle
A	Beaujolais, Champion	Dornfelder (Pfalz), St Gisbertus	3	6 €	2 €
B	Beaujolais, Fleurie	Dornfelder (Pfalz), Mussler	2	6 €	3 €
C	Dornfelder, Palatinat	Beaujolais Chateau de l'Eclair	1	6 €	6 €

Results of Price / preference trade-off

Red wine

• France



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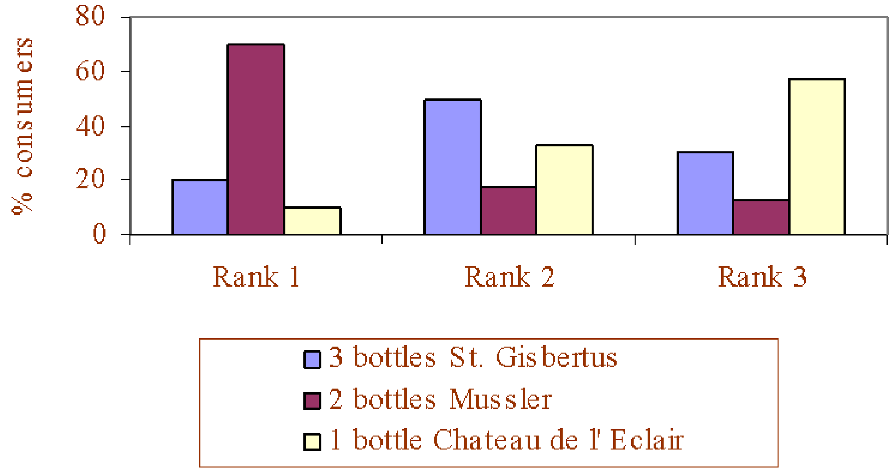
Results of Price / preference trade-off

Red wine

• Germany



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Conclusions

- Geographical origin for typical products is important in all countries

  (trust, control, traceability, product involvement)
- Taste as the most important sensorial value
- Emotional values play an important role

  (preserve traditions, favours rural economy, prestige)
- Willingness to try foreign not known typical products in France

  and Germany at a very high price
- Typical products rank first at a higher price than the rest

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Typical Food Products in Europe: Consumer Preference and Objective Assessment

TYPIC 2003-2005 QLK1-CT-2002-02225

Preferred Attributes by Consumers

Marina Petzoldt

Fachgebiet für Marktlehre
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TYPIC

Method of Conjoint Analysis

Conjoint Analysis answers the following questions:

- How much contribute different attributes to the total utility of a product?
- Which combinations of attribute-levels are mostly preferred by consumers?
- Are there heterogeneous preferences, allowing to join consumers with homogeneous preferences into segments?

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Method of Conjoint Analysis

Procedure:

- Attributes are systematically varied and combined → creation of several different product stimuli
- Respondents have to rank these product stimuli in accordance to their preferences
- On basis of that ranking utilities of each attribute and level are calculated
- Sum of single utilities = total utility
- Example for wine: 2 Attributes/2 Levels

Vintage / Price per bottle	
2002 / 2,29 €	2002 / 4,99 €
2003 / 2,29 €	2003 / 4,99 €

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Selection of attributes and levels

- Selection of attributes and levels by
  - literature study (market studies)
  - focus groups with consumers

- Aim: Selection of attributes and levels which
  - are relevant for the purchase decision in each single country
  - allows a comparison of results between countries

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Ham: Attributes and Levels

SPAIN

ATTRIBUTE	***LEVELS***		
Origin	Teruel (regional)	Serrano (national)	Bayonne (foreign)
Certification	quality certified (PDO, STG)	not quality certified	
Brand	producer\`s brand	distributor\`s brand	
Price/kg	18 €	24 €	32 €

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Ham: Attributes and Levels

FRANCE

ATTRIBUTE	***LEVELS***			
Origin	Auvergne (regional)	Bayonne (national)	Iberico (foreign)	Unknown
Certifi-cation	Label Rouge	PGI	No label	
Brand	On farm	Champion (distributor)	Aoste (producer)	
Price/ 100 gr.	1,90 €	3,90 €	5,90 €	

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Ham: Example of presented cards

SPAIN

Card A	
Serrano ham	
Speciality Traditional Guaranteed (S.T.G.)	
Private brand	
Price: 32 €/kg (5325 ptas/kg)	

FRANCE

JAMBON SEC

Origine : AUVERGNE

Marque : ***Champion***

Emballé le : 04/06/2004
A consommer jusqu 'au: 04/08/2004

O3 B1 L3 P3 0123456789**B**

Prix **1.90 €**
4 tranches
Poids net 100 g
Prix en Fcs 12.46 F
Prix/Kg 19.00 €

Please, rank these cards according to your preferences or <u>the order in which you would buy them,</u> for regular consumption at home.

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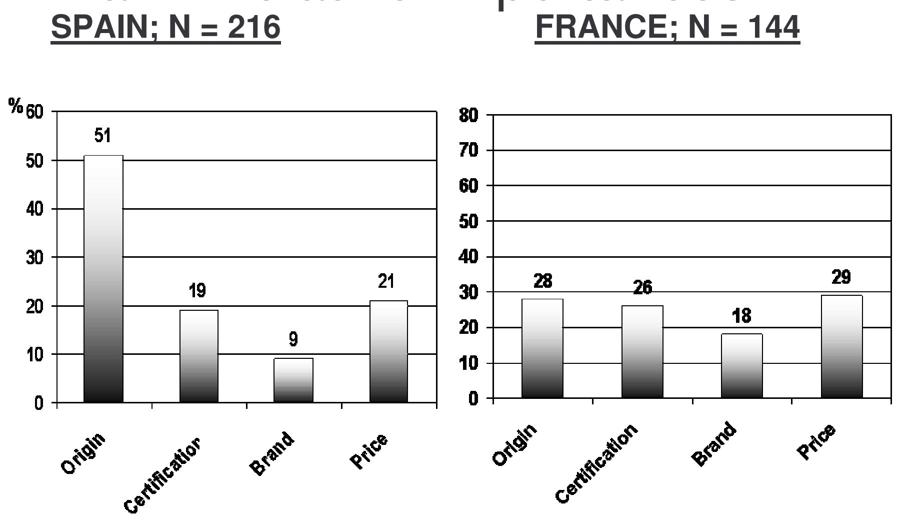
Ham: Relative Importances



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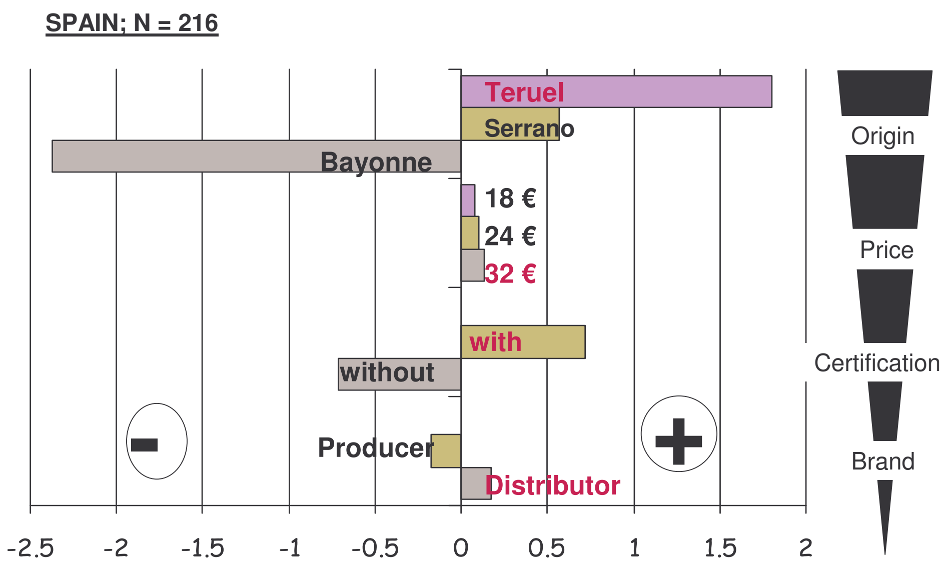
Ham: Utilities



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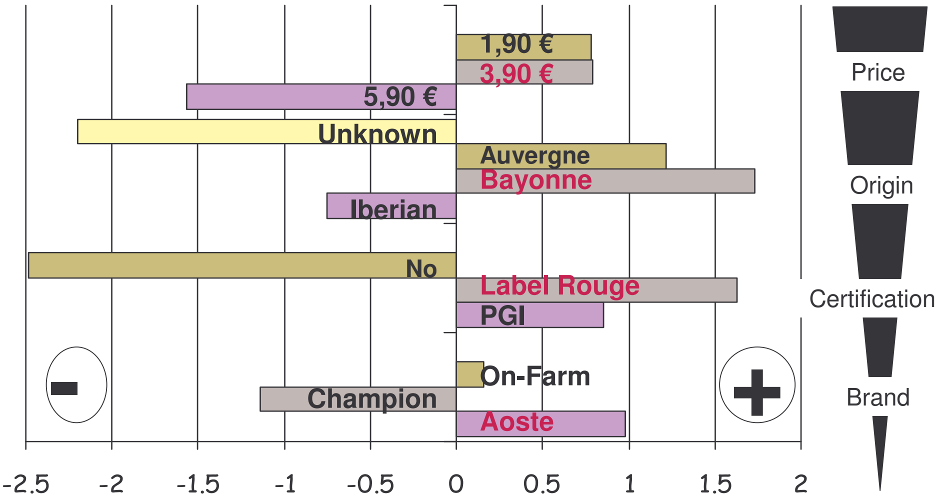
Ham: Utilities

FRANCE; N = 144



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Ham: Concluding Remarks

Attributes and Levels which are comparable between countries

Attribut	Levels	SPAIN	FRANCE
Origin	regional	++	+
	national	+	++
	foreign	-	-
Price	low level	+	+
	medium level	++	++
	high level	+++	-
Certification	with	+	+
	without	-	-
Brand	distributor	+	-
	producer	-	+

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Wine: Attributes and Levels

FRANCE

ATTRIBUTE	***LEVELS***		
Origin	Auvergne (regional)	Beaujolais (national)	Dornfelder (foreign)
Brand	Local brand	Champion	Fleurie
Vintage	2001	2003	
Price/ bottle	1,90 €	3,90 €	5,90 €

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Wine: Attributes and Levels

GERMANY

ATTRIBUTE	***LEVELS***		
Origin	Pfalz	Württem-berg	Beaujolais (foreign)
Producer-type	estate	winery	cooperative
Vintage	2002	2003	
Price/ bottle	2,29 €	3,49 €	4,99 €

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Wine: Example of presented cards

FRANCE

Vin Rouge

Origine: Beaujolais

Appellation d´Origine Côntrollée

2003

Marque : *Fleurie*

Prix **3.90 €**

O3 B1 L3 P3 0123456789**F**

Prix en Fcs 25.58 F

GERMANY

2003

Dornfelder

Anbaugebiet: Pfalz

Weingut

3,49 €

L

Please, rank these cards according to your preferences or the order in which you would buy them, for regular consumption at home.

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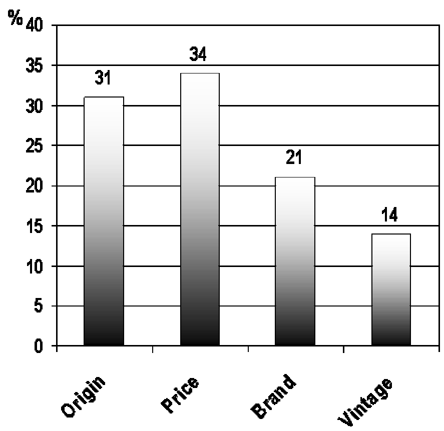
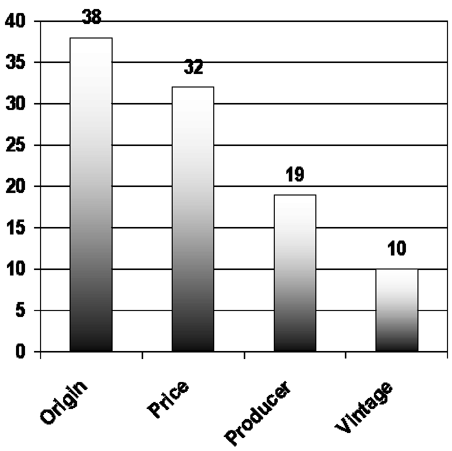
Wine: Relative Importances

FRANCE, N = 67



GERMANY, N = 194



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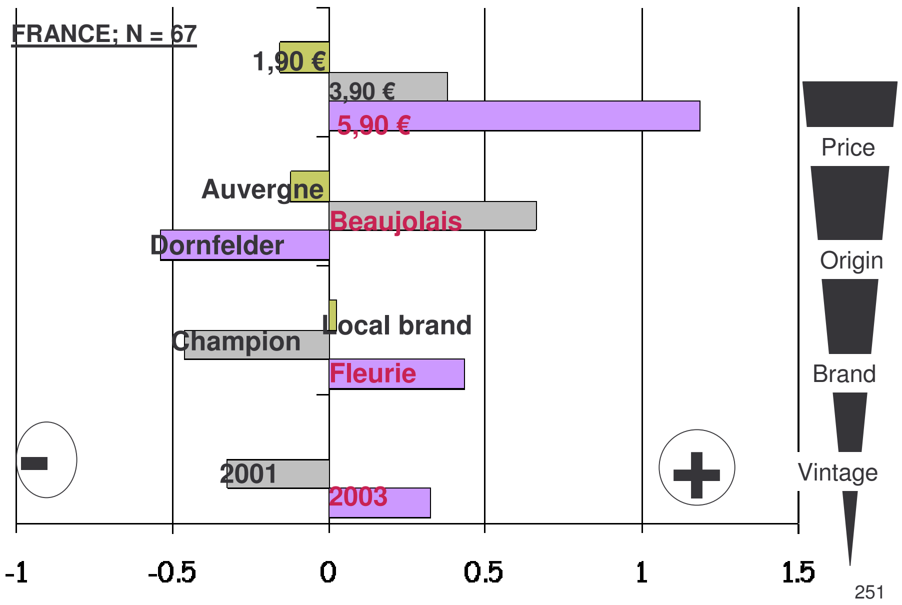
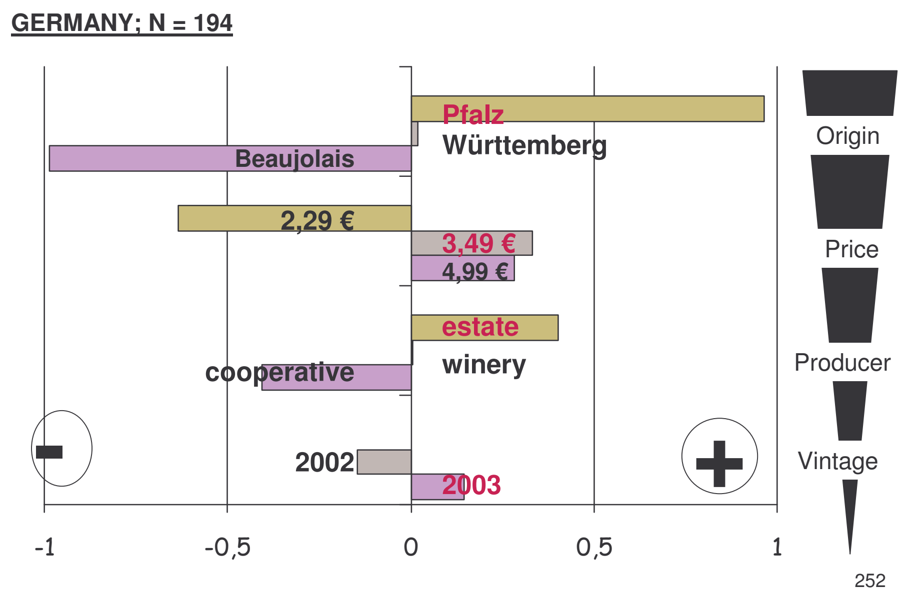
Wine: Utilities



Wine: Utilities



Wine: Concluding Remarks

Attributes and Levels which are comparable between countries

Attribut	Levels	FRANCE	GERMANY
Origin	regional	-	++
	national	+	
	foreign	--	-
Price	low level	-	-
	medium level	+	++
	high level	++	+
Vintage	older	-	-
	younger	+	+

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Consumer Purchasing Behaviour Towards Typical Food Products in France, Germany and Spain

G. Giraud ENITA Clermont

with help of A. Letort, J.N. Serra, C. Amblard, L.M. Albisu, A.I. Sanjuan, H. Resano,

U. Enneking, M. Petzoldt, I. Trigui

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enita Clermont

Recruitment of Panellists

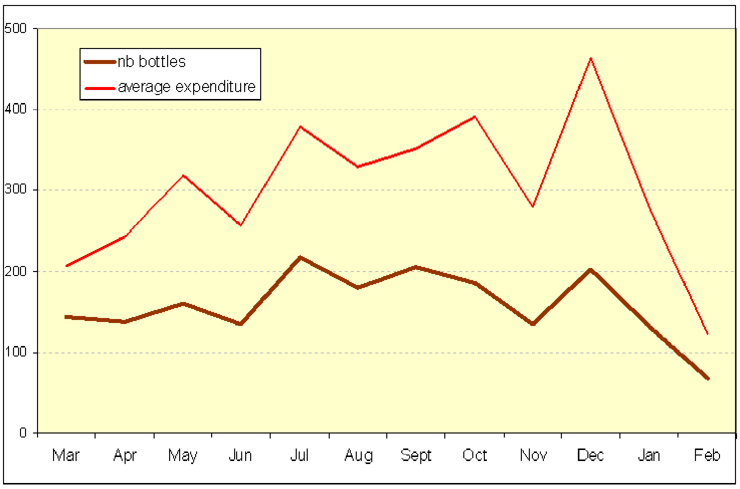
- **FRANCE**
  7 Champion supermarkets Auvergne
  2 urban supermarkets, 2 sub-urban, 3 rural
  Record of actual purchases
  Dry-cured ham: **612 customers**
  Wine: **382 customers**

- **GERMANY** (only red wine)
  Own panel during 6 months
  Two regions: Saarland/Pfalz, Bavaria
  2215 interviewees **254 self reported purchases**

- **SPAIN** (only dry-cured ham)
  Two Carrefour hypermarkets in Zaragoza
  Record of actual purchases
  5640 customers

255

Seasonal consumption of Beaujolais and Auvergne wines



Most buyers buy only one brand (86.3%), 10.1% buy two brands, 3.6% more than 2 brands

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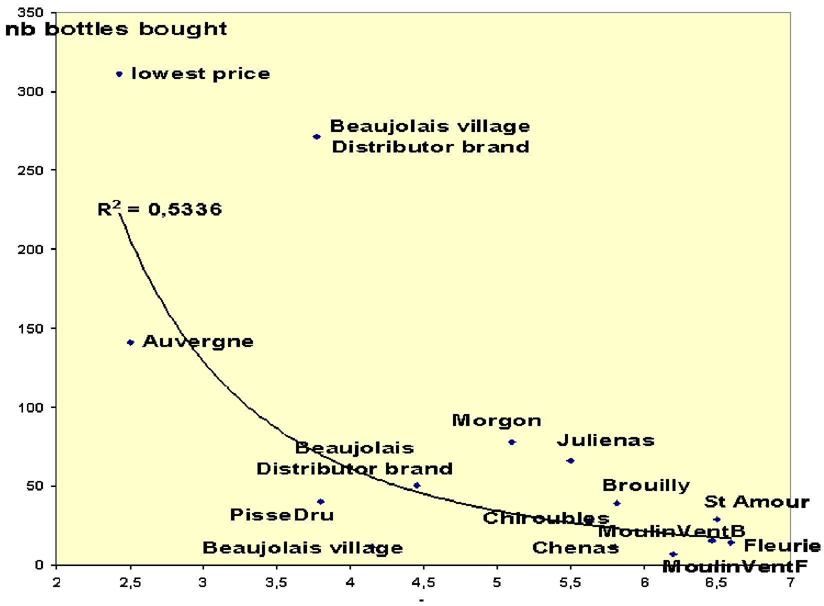
Price sensitivity of wine demand France



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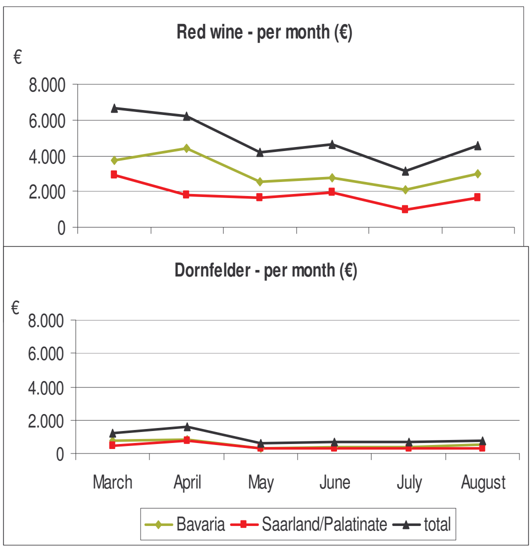
Red wine purchasing self-report Germany



Region of production:

Higher consumption Dornfelder

More direct sale and short channel

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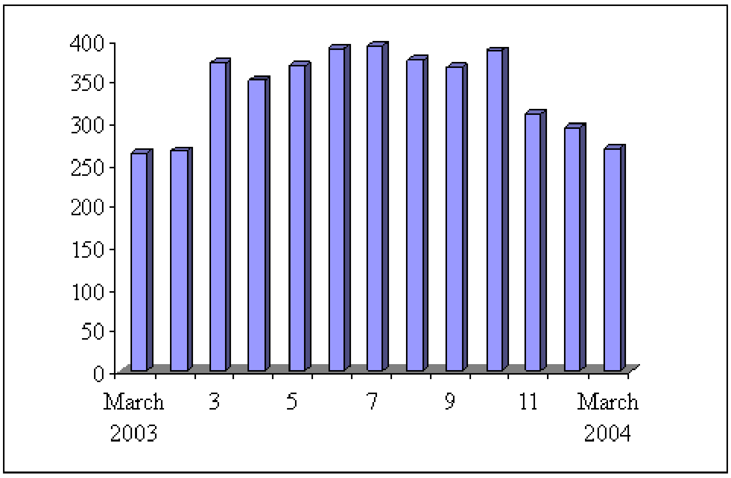
FRANCE-HAM Monthly purchases



Majority of buyers buy 2 different products (47.3%), few buy one product (9.6%) a noticeable number bought more than 4 products (15.4%)

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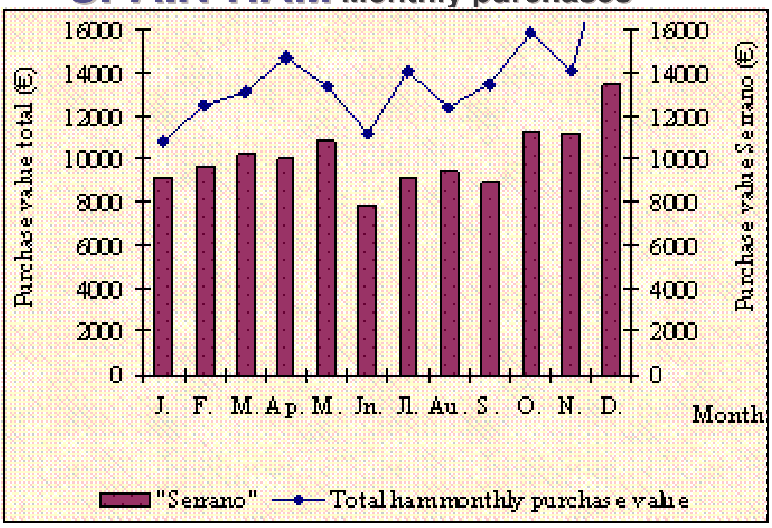
SPAIN-HAM Monthly purchases



71.0% of consumers did not buy more than 2 articles over 1 year
48.7% bought 1 article only

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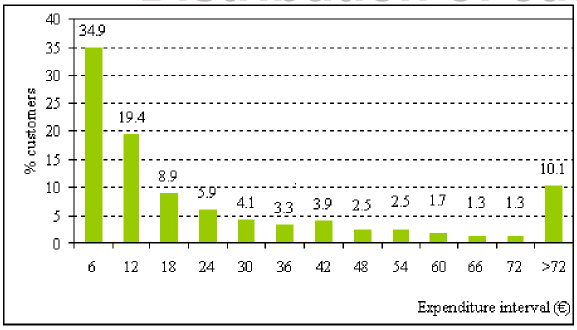
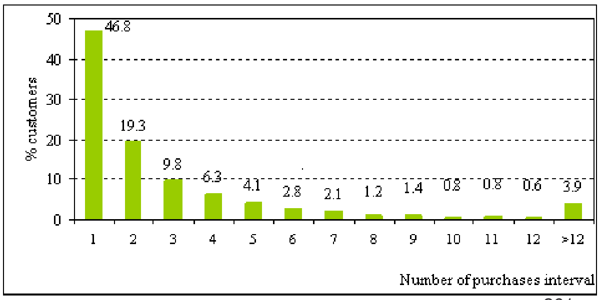
Distribution of customers

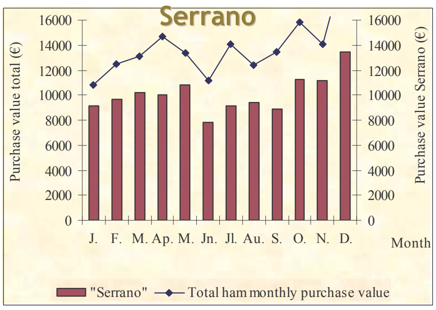


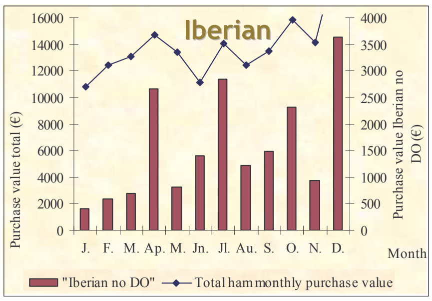
expenditure

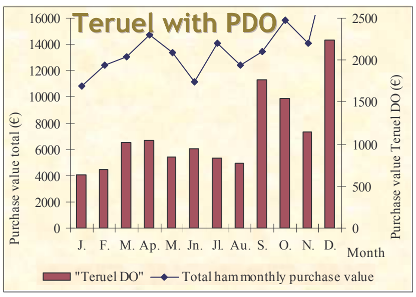
number of purchases

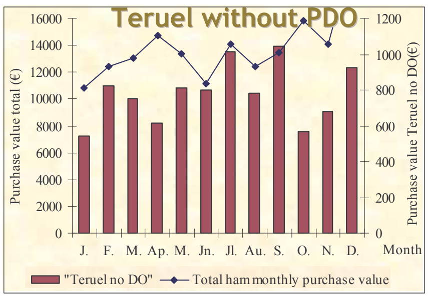


Seasonality of sales



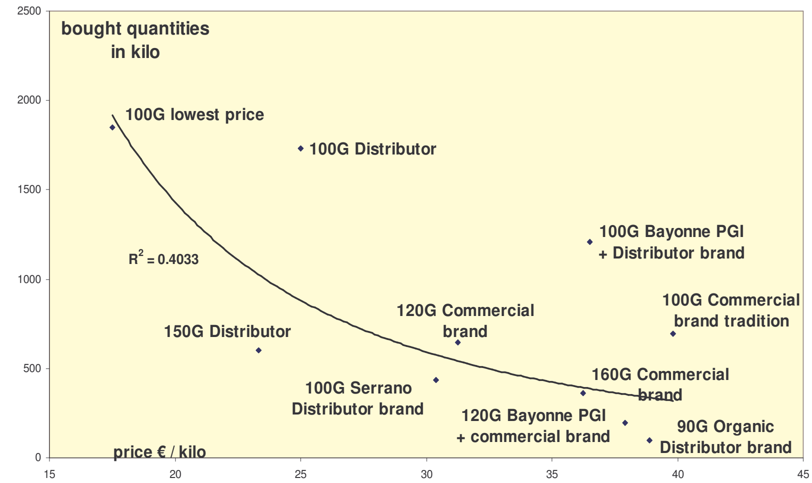






Dry-cured ham France

Price sensitivity of demand



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Consumer loyalty behaviour of French consumers on dry-cured ham

Duplication of purchases per price category			
Buyers of…	% who also bought		
	Low Price	Medium Price	High Price
Low Price	-	87.02	74.81
Medium Price	21.15	-	74.03
High Price	15.38	62.64	-
Penetration	16.84	**69.28**	81.88

Price and brand sensitivity			
(%)	Light Buyers	Medium Buyers	Heavy Buyers
Designation			
PGI	34,83	31,34	33,83
none	**42,61**	29,44	27,96
Brand Type			
Distributor	**40,15**	30,08	29,77
Commercial	**40,81**	29,91	29,27
Lowest Price	8,4	38,17	**53,44**

Number of different products bought	%
1	9.64
2	**47.30**
3	27.63
min 4	15.42

- Quality label has little influence on actual loyalty
- Behavioural loyalty is still under the influence of price hierarchy
- Some consumers are not price sensitive, but still have various preferences and variety seeking behaviour

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Conclusion

- Dry-cured ham: a repertoire market
  - few solely loyal buyers
- Wine: a subscription market
  - many solely loyal buyers to one brand
- Both under
  - preference for local products /daily consumption
  - brand influence low variety seeking
    - brand notoriety or merchandising?
  - contextual influence
    - seasonal effect
    - usually low frequency purchase for PDO-PGI
    - high consumption or high price choice /special events
- Double and opposite price effect
  - Good value for money
  - High price as a quality predictor

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Is Typicality Legitimated? Focus on Results of Some Specific Differentiated Products

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TYPIC

cita
CENTRO DE INVESTIGACIÓN Y TECNOLOGÍA AGROALIMENTARIA DE ARAGÓN

Source of information

1. **Hedonic tests**
   - Sensorial valuation of 10 hams
   - 216 participants
2. **Hedonic tests and scanner data**
   - Sales of evaluated brands (5640 clients)
   - Purchases of participants

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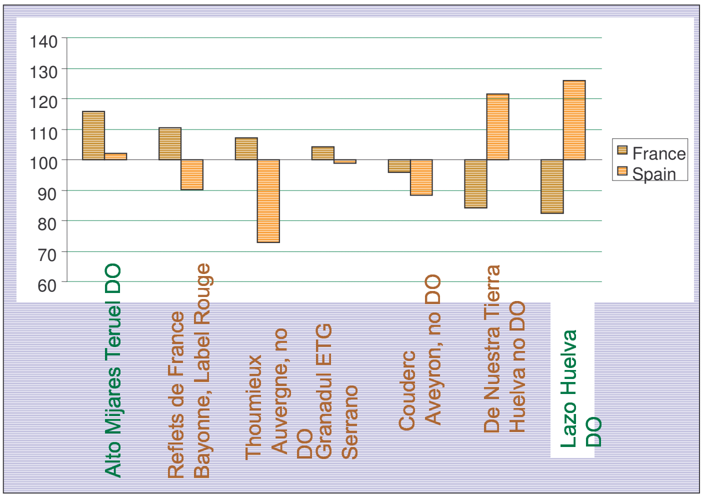
Hedonic test

Relative blind score: average of 7 brands, in France and Spain, n= 100



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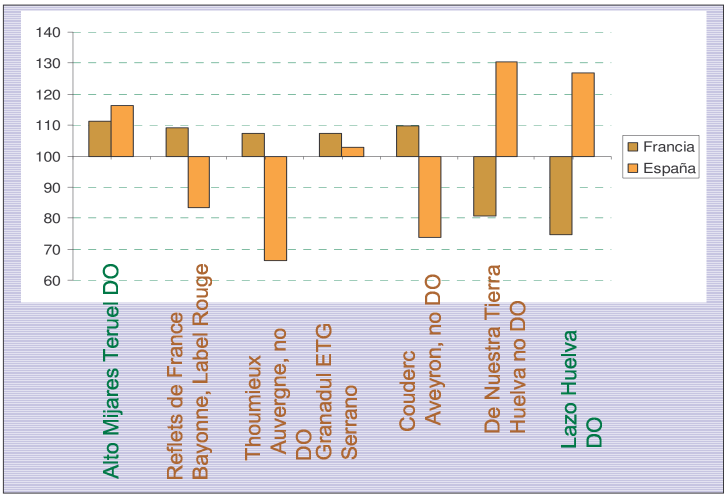
Hedonic test

Relative identified score: average of 7 brands, in France & Spain, n=100



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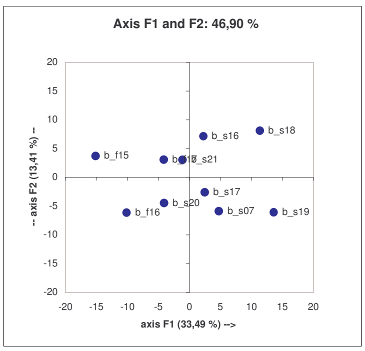
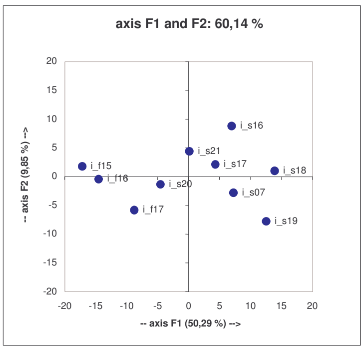
Hedonic test

Blind vs identified test
Principal Component Analysis



Blind test



Identified test

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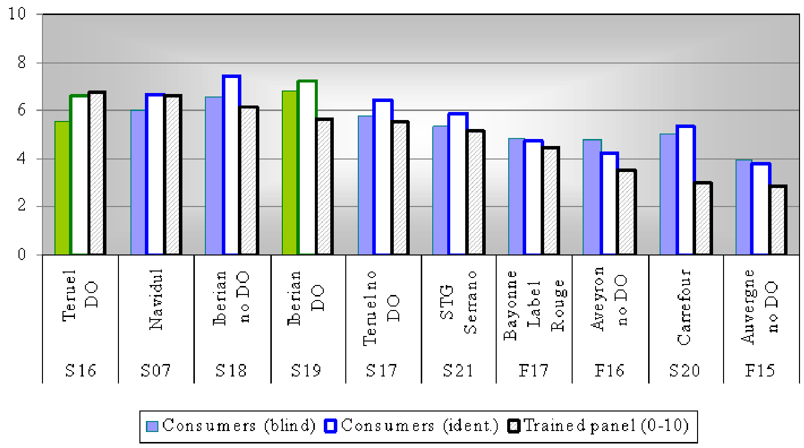
Hedonic test

Comparison between consumers and the trained panel in Spain



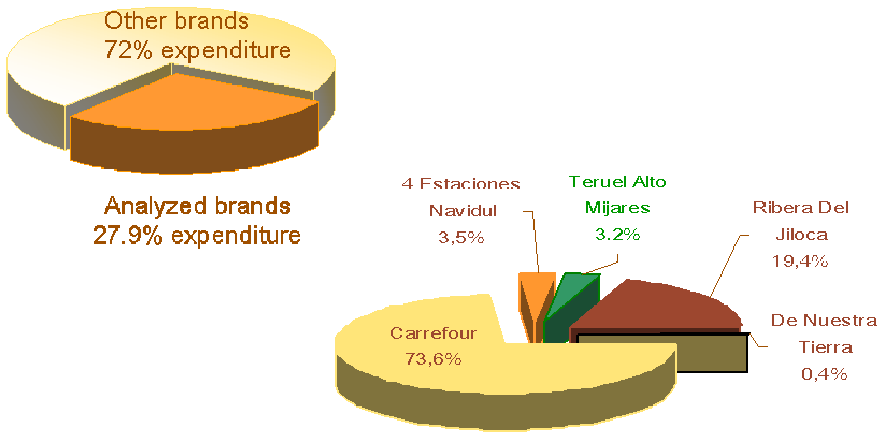
2. Hedonic test and scanner data

Sales of evaluated brands (scanner data)

Brand	Nº obs	Quantity (kgs)	% category quantity	Sales (€)	% Category sales	Category Quantity	ranking Sales
Carrefour	6774	3780	26.1%	35952	29.9%	1	1
Navidul 4 Est.	86	513	3.5%	4678	3.9%	9	7
DO Teruel Alto Mijares	63	320	33.9%	3116	23.1%	2	3
Ribera del Jiloca	571	469	75.8%	6001	64.1%	1	1
De Nuestra Tierra	40	5	0.4%	416	2.2%	13	8

2. Hedonic test and scanner data

Purchases of panellists (scanner data)



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Conclusion

- The most valuable ham is not the most sold, probably due to the price
- Spanish consumers prefer Iberian hams, whereas the French consumers, that are more used to the White breed ham, do not appreciate it
- Teruel ham DO is specially appreciated by French consumers, hence there is a potential market for it in France

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