

# Food Safety Risks and Consumers' Demand for Credence Characteristics

### Terhi Latvala

Pellervo Economic Research Institute PTT

NJF's 23rd Congress 'Trends and Perspectives in Agriculture' June 26-29, 2007 Copenhagen



# Table of contents

- Definition of Food Quality
- Theoretical Framework:

Economics of Information

- Methodology: Contingent Valuation
- Results
- Conclusions



#### FOOD SAFETY DIMENSION

- heavy metals
- pesticides
- chemical residues
- microbiological safety

#### SENSORY DIMENSION

- fresness
- taste
- appearance
- tenderness

Definition of Food Quality NUTRITIONAL DIMENSION - vitamins - fat - fiber, etc.

> USE DIMENSION - package size - food preservation

PROCESS RELATED DIMENSION

- animal welfare
- environment
- quality system
- traceability

PACKING DIMENSION - material

- information
- degradable

## Theoretical framework: Economics of information

- Akerlof (1970) model: The markets for "lemons": quality uncertainty and the market mechanism
- If information between market actors is asymmetric seller has information advantage over buyer – this leads to so called adverse selection

If there is a lack of information in the market, and quality cannot be signalled to consumers only lower quality will be available

Darby and Karni (1973): Credence quality - buyers cannot assess quality attributes by them

# Method: Contingent valuation

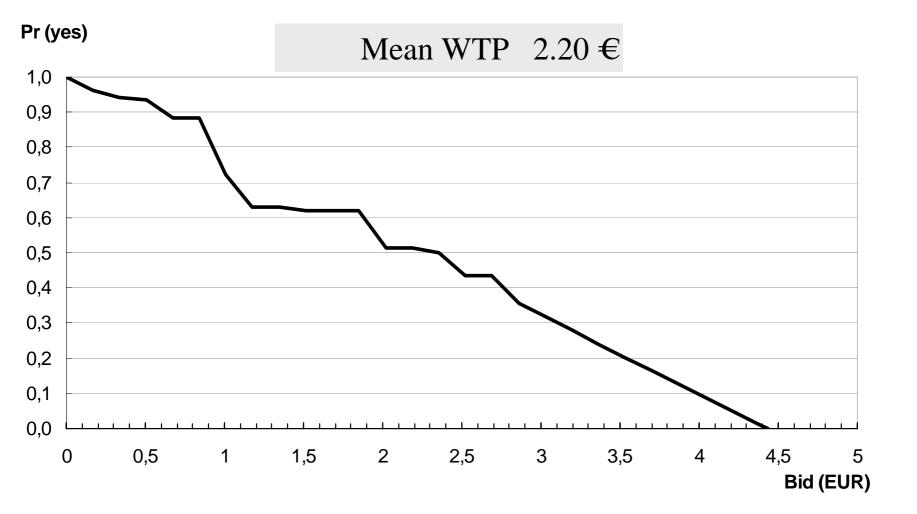
Aim of the study

Are consumers willing to pay for additional information about beef quality and safety?

"The contingent valuation method was applied. In this method consumers are asked *ex ante* their willingness to pay (WTP) in order to obtain a perceived benefit, which is presented in a hyphotetical scenario concerning the good in question"

A non-parametric approach based a theorem of Ayer et al. was used to estimate WTP distribution.

# *Results: The empirical survival function*





- 59 % of consumers are willing to pay more to get information about safety and quality of beef products

- Within this group the mean WTP was 2.20 EUR
- Consumers need for additional information:
  - (1) The control of food of animal origin
  - (2) GMO in animals
  - (3) Country of origin
  - (4) Use of hormones



Towards more consumer oriented food chain and higher quality food markets, we need...

... better information of quality attributes of food products, giving special emphasis to credence attributes

... by using electronic databases and other electronic business means of modern information technology



## Thank you for your attention!