Preference and willingness to pay for products with OrganicPlus arguments

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- Prof. Dr. Bernd Freyer & Katharina Gössinger, BOKU, Österreich
- Dr. Susanne Padel, The Organic Research Centre, Elm Farm, UK

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Introduction

- Actual European organic market trends
  - growing number of ethically and socially committed consumers
  - growing demand for products with regional identity
  - growing amounts of organic imports
  - globalisation & decreasing traceability of organic trade
  - uncertainty if imports fulfil ethical, social and environmental conditions
  - domestic organic farmers compete with producers in expert countries, where production costs are lower
  - domestic organic producers increasingly have to accept discount producer prices.
Introduction

➢ A way to act towards this development: Farmer-Consumer-Partnership:
  ➢ emphasis on condition of domestic production and voluntarily integrate social and environmental concerns in production and communicate these activities
  ➢ higher production costs requires higher willingness to pay
➢ Examples of OrganicPlus marketing:
Introduction

- Organic farming systems offer vast potential of OrganicPlus communication strategies related to social, economic or environmental activities that go beyond the European Organic Standards (EEC 2092/91)
  - OrganicPlus arguments
- European-funded project CORE Organic Farmer Consumer Partnerships:
  - Objectives of the project: test innovative communication strategies of organic products as a means to reconnect organic farmers and consumers
    - Select the most successful OrganicPlus arguments
    - Test consumers preferences and buying behaviour
    - Investigate consumers willingness to pay
    - Identify consumer segments
Methods

- Choice Experiment: to observe buying behaviour towards selected OrganicPlus products
- Survey: to collect information about the consumers in 2009 in: United Kingdom (UK), Germany (DE), Austria (AT), Italy (IT) and Switzerland (CH)
- n = 80 in each country
- Target group: organic consumers, identified by a questionnaire
Methods

- Laboratory choice experiment, unlabeled design with 6 choice situations per consumer
- In each choice situation three organic egg alternatives, two OrganicPlus alternatives, one reference alternative (basic organic eggs without OrganicPlus argument)
- OrganicPlus arguments tested:
  - From the respective country
  - From the respective region
  - Highest animal welfare standards
  - Fair prices for our producers: 20 pence extra
- Product price varied in three price levels:
  - 1. level: Average organic egg price in the country
  - 2. level: 120 percent of average organic egg price
  - 3. level: 140 percent of average organic egg price
Methods

Example of a choice set in UK

<table>
<thead>
<tr>
<th>Price per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.42 GBP</td>
</tr>
<tr>
<td>2.83 GBP</td>
</tr>
<tr>
<td>2.02 GBP</td>
</tr>
</tbody>
</table>
Methods

Survey:

- Consumers’ attitudes towards the OrganicPlus arguments
- Buying habits related to organic food
- Socio-demographic characteristics:
  - Household size
  - Income
  - Educational level
  - Age
  - Gender
- Social and environmental engagement
Analysis

Multinomial logit model:
➢ Estimation of importance (coefficient, weight) of OrganicPlus arguments, estimation of influence of price levels

Willingness to pay analysis:
➢ WTP OrganicPlus = - (coefficient OrganicPlus/price coefficient)
## Results

Multinomial and mixed logit models (euros)

<table>
<thead>
<tr>
<th></th>
<th>ALL</th>
<th></th>
<th>UK</th>
<th></th>
<th>DE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MNL</td>
<td>MXL</td>
<td>MNL</td>
<td>MXL</td>
<td>MNL</td>
<td>MXL</td>
</tr>
<tr>
<td>B_COU</td>
<td>-0.191*</td>
<td>-0.035</td>
<td>-0.328</td>
<td>-0.254</td>
<td>-0.392</td>
<td>-0.528</td>
</tr>
<tr>
<td>B_REG</td>
<td>0.903***</td>
<td>1.497***</td>
<td>0.570***</td>
<td>0.732***</td>
<td>1.224***</td>
<td>1.583***</td>
</tr>
<tr>
<td>B_ANI</td>
<td>0.560***</td>
<td>0.938***</td>
<td>0.054</td>
<td>0.058</td>
<td>0.759***</td>
<td>1.047**</td>
</tr>
<tr>
<td>B_FAIR</td>
<td>0.370***</td>
<td>0.554***</td>
<td>0.198</td>
<td>0.268</td>
<td>0.445***</td>
<td>0.825***</td>
</tr>
<tr>
<td>B_PRICE</td>
<td>-1.352***</td>
<td>-2.943***</td>
<td>-2.032***</td>
<td>-4.265***</td>
<td>-1.589***</td>
<td>-2.475***</td>
</tr>
<tr>
<td>SQ</td>
<td>-1.125***</td>
<td>-1.745***</td>
<td>-2.252***</td>
<td>-3.694***</td>
<td>-0.942</td>
<td>-1.263</td>
</tr>
</tbody>
</table>
## Results

### Multinomial and mixed logit models (euros)

<table>
<thead>
<tr>
<th></th>
<th>AT</th>
<th></th>
<th>IT</th>
<th></th>
<th>CH</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MNL</td>
<td>MXL</td>
<td>MNL</td>
<td>MXL</td>
<td>MNL</td>
<td>MXL</td>
</tr>
<tr>
<td>B_COU</td>
<td>0.544*</td>
<td>0.884*</td>
<td>0.058</td>
<td>0.524</td>
<td>0.172</td>
<td>0.499</td>
</tr>
<tr>
<td>B_REG</td>
<td>0.491*</td>
<td>0.906*</td>
<td>0.961***</td>
<td>2.350***</td>
<td>0.642***</td>
<td>1.428***</td>
</tr>
<tr>
<td>B_ANI</td>
<td>0.722**</td>
<td>1.129*</td>
<td>0.241</td>
<td>0.673</td>
<td>0.563**</td>
<td>1.156**</td>
</tr>
<tr>
<td>B_FAIR</td>
<td>0.263</td>
<td>0.396</td>
<td>0.163</td>
<td>0.513</td>
<td>0.270*</td>
<td>0.514*</td>
</tr>
<tr>
<td>B_PRICE</td>
<td>-2.930***</td>
<td>-5.290***</td>
<td>-2.454***</td>
<td>-5.644***</td>
<td>-1.386***</td>
<td>-2.434***</td>
</tr>
<tr>
<td>SQ</td>
<td>-1.691*</td>
<td>-3.124**</td>
<td>-2.144***</td>
<td>-3.669***</td>
<td>-1.212*</td>
<td>-1.301</td>
</tr>
<tr>
<td>Final LL</td>
<td>-289.092</td>
<td>-244.837</td>
<td>-317.852</td>
<td>-264.669</td>
<td>-416.837</td>
<td>-346.012</td>
</tr>
</tbody>
</table>
## Results

**Willingness to pay (WTP) in euros**

<table>
<thead>
<tr>
<th></th>
<th>ALL</th>
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<th>DE</th>
<th>AT</th>
<th>CH</th>
<th>IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>From the region</td>
<td>1.34</td>
<td>0.59</td>
<td>1.62</td>
<td>0.33</td>
<td>1.17</td>
<td>0.77</td>
</tr>
<tr>
<td>From the country</td>
<td>-0.28</td>
<td>-0.34</td>
<td>-0.53</td>
<td>0.37</td>
<td>0.17</td>
<td>0.07</td>
</tr>
<tr>
<td>Highest animal welfare standards</td>
<td>0.84</td>
<td>0.07</td>
<td>0.97</td>
<td>0.49</td>
<td>1.02</td>
<td>0.20</td>
</tr>
<tr>
<td>Fair producer prices</td>
<td>0.55</td>
<td>0.20</td>
<td>0.57</td>
<td>0.18</td>
<td>0.53</td>
<td>0.13</td>
</tr>
</tbody>
</table>
Results

Consumer segments:

1. Preference and WTP for „from the region“:
   - higher educated consumers
   - who believe that products from the own region have a higher quality in terms of taste and freshness
   - who believe local products provide higher food safety

2. Preference and WTP for „highest animal welfare standards“:
   - consumers with higher income
   - who predominantly purchase organic food in wholefood shops or organic supermarkets
   - who have a high involvement into animal welfare
   - who recommend that the organic sector and the government should promote highest animal welfare standards

3. Preference and WTP for „fair producer prices“:
   - predominantly favoured by consumers with high social commitment
   - who recommend that fair producer prices should be promoted by the organic farming sector and by the government
Conclusions

- Organic products with OrganicPlus arguments are more preferred by consumers than products without OrganicPlus arguments.
- Among the OrganicPlus arguments tested, regional is the most promising argument.
- Preference and WTP was highest.
- As the economic value is highest for local organic products, the organic farming sector, the government as well as food retailers should address this issue and initiate provisions that enhance local food cycles.
- “Fair producer prices” is expected to become more relevant in the future.
Thank you for your attention!

ACKNOWLEDGEMENT

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