Producer organisations in the meat sector

Conference « The contribution of producer organisations to an efficient agri-food supply chain”

Sabine Duvaleix-Tréguer

SMART-LERECO, AGROCAMPUS OUEST - INRA, Rennes, France

www.rennes.inra.fr/smart/
sabine.treguer@agrocampus-ouest.fr

Brussels, September 21st, 2018
Definition

Producers organisations

• are formed on the initiative of producers, and
• producer members have to be enable to scrutinise democratically their organisation and its decisions.

Producer organisations ≠ agricultural cooperatives
The EU OMNIBUS regulation (12/12/2017)

- Favor horizontal coordination in order to
  - Strengthen the position of farmers in the food supply chain
  - Contribute to a better functioning of the food supply chain

- POs with different roles:
  i. concentrate supply,
  ii. improve the marketing,
  iii. plan and adjust production to demand,
  iv. optimise production costs and stabilise producer prices,
  v. carry out research
  vi. promote best practices and provide technical assistance
  vii. manage by-products, risk management tools available to their members
Outline

1. Key facts on French producers organisations in the animal production sector (Network on “Economics of animal productions”)
2. Results on PO and member performance in hog production (Duvaleix-Tréguer and Gaigné, 2018)
3. Some broader comments
### Key features/facts

**Example from the French POs**

<table>
<thead>
<tr>
<th>Agricultural sector</th>
<th>Number of French recognised POs</th>
<th>Production share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy</td>
<td>59</td>
<td>25%</td>
</tr>
<tr>
<td>Pig</td>
<td>37</td>
<td>89%</td>
</tr>
<tr>
<td>Poultry</td>
<td>27</td>
<td>34%</td>
</tr>
<tr>
<td>F&amp;V*</td>
<td>254</td>
<td>≈50%</td>
</tr>
</tbody>
</table>

**Source**: Network on « Economics of animal productions »

*CGAAER report n°11104 (2012)
Technical assistance - Example for the French animal production sector

Source: Network on « Economics of animal productions »
A CASE STUDY: PRODUCER ORGANISATIONS AND MEMBERS PERFORMANCE IN HOG PRODUCTION

Duvaleix-Tréguer and Gaigné (2018)

Agricultural cooperatives and producer organizations may be a coordination scheme that can affect the performance of their members.

90% of French hog production is sold through POs
A case study: Producer Organisations and Members Performance in Hog Production

How do the vertical linkages of producer organisations (POs) influence farmers' economic performance?

- We explore how the financial links between POs and upstream and downstream firms affect the cost structure of hog farms.

Farmers gather to create producer organizations for several reasons

- independent PO (horizontal coordination)
- supply and/or marketing PO (vertical organisation)

In our research work, we classify hog PO into three types

the hog farmer can belong to one of three types of PO

- Independent: exclusively horizontal coordination
- Marketing: the PO has financial links with a downstream firm
- Supply and Marketing: the PO has financial links with upstream and downstream firms

Duvaleix-Tréguer and Gaigné (2018), Producer organisations and members performance in hog production
Data

- A unique Farm-level database
  - from the French Institute of Hog Sector
  - With a link between each hog farm and the PO he/she is a member of

- Precise technical and economic information at each production stage

- We collect information to establish the downstream (meatpackers) and upstream (feed mill and/or genetic selection firms) financial links of the hog POs.

- We did a quantitative economic analysis to assess marginal costs

---

<table>
<thead>
<tr>
<th>Number of farms (2011 &amp; 2012)</th>
<th>Technical information</th>
<th>Bookkeeping survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent PO</td>
<td>1 278</td>
<td>130</td>
</tr>
<tr>
<td>Marketing PO</td>
<td>572</td>
<td>443</td>
</tr>
<tr>
<td>Supply &amp; mkg PO</td>
<td>2 999</td>
<td>354</td>
</tr>
<tr>
<td>Total</td>
<td>4 849</td>
<td>927</td>
</tr>
</tbody>
</table>

Duvaleix-Tréguer and Gaigné (2018), Producer organisations and members performance in hog production
Summary statistics

Duvaleix-Tréguer and Gaigné (2018), Producer organisations and members performance in hog production
Summary statistics

Duvaleix-Tréguer and Gaigné (2018), Producer organisations and members performance in hog production
The hog producers who are members of a supply and marketing PO get lower marginal costs than the others.

The hog producers who are members of a marketing PO get the highest marginal cost.

The majority of hog farms exhibit scale economies.

<table>
<thead>
<tr>
<th></th>
<th>Marginal cost (Average cost)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent PO</td>
<td>139.7 (146.8)</td>
</tr>
<tr>
<td>(130 obs)</td>
<td></td>
</tr>
<tr>
<td>Marketing PO</td>
<td>147.1 (156.7)</td>
</tr>
<tr>
<td>(443 obs)</td>
<td></td>
</tr>
<tr>
<td>Supply &amp; mkg PO</td>
<td>130.8 (152.9)</td>
</tr>
<tr>
<td>(354 obs)</td>
<td></td>
</tr>
</tbody>
</table>

Marginal cost: the additional cost to produce one more unit

Duvaleix-Tréguer and Gaigné (2018), Producer organisations and members performance in hog production
## Results

Two possible explanations for the observed differences
- Farmers may have access to a different technology
- Farmers may cope with different feed prices

<table>
<thead>
<tr>
<th></th>
<th>Marginal Cost</th>
<th>Feed price</th>
<th>Output price</th>
<th>Average Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent PO</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
</tr>
<tr>
<td>Marketing PO</td>
<td>5.8***</td>
<td>Non significant</td>
<td>4.0*</td>
<td>Non significant</td>
</tr>
<tr>
<td>Supply &amp; Mkg PO</td>
<td>-5.5***</td>
<td>49.6*</td>
<td>Non significant</td>
<td>Non significant</td>
</tr>
</tbody>
</table>

Duvaleix-Tréguer and Gaigné (2018), Producer organisations and members performance in hog production
Conclusion

- These results provide insightful paths to investigate the effects of the types of POs on farms' performance.

- The positive effect of joining Supply & Marketing PO on cost efficiency captures two potential mechanisms.
  - The most efficient or larger farms prefer to join this type of PO (sorting effect).
  - By integrating backward (and forward), the PO is able to pass its scale economies on to farmers.

Duvaleix-Tréguer and Gaigné (2018), Producer organisations and members performance in hog production
Some broader comments

Sharing or increasing the pie?

- Competition: some negative/positive effects in markets
  - Price war
  - Innovation

- Strengthening the position of farmers in the food supply chain
  - How horizontal coordination might affect vertical relationships?
    - Cost efficiency, adoption of new technologies …
Producers organisations and public policies

- Incentivizing participation in quality schemes for
  - The use of production standards,
  - Improving product quality
  - Developing products with a PDO, PGI or national quality label (Duvaleix-Tréguer, Emlinger, Gaigné, et Latouche, 2018)

- Sustainable issues
  - Example of antibiotics use in the young beef sector (Poizat, Duvaleix-Tréguer, Bonnet-Beaugrand, 2018)
  - How do vertical coordination schemes influence the adoption of ecological practices by farmers?
    (European research project LIFT (‘Low-Input Farming and Territories - Integrating knowledge for improving ecosystem-based farming’))


Thank you!

Questions are welcomed