Managing the Food Shocks of the Great Transition

Flemish Cities and the Food Crises of the Fourteenth Century

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Workshop Sowing the Seeds VI – LSE
Presentation of preliminary results. Please do not cite or distribute

CENTRAL QUESTION

› Decision-making in agriculture by large landowners
› Reactions to food prices
› Great Transition Period (Campbell): 1330-1370: period of numerous food price spikes

› ADAPTATIONS?
1. Towards profit maximization?
2. Towards provisioning of the household?
3. Part of a broader ‘Moral Economy’?
4. Or no general pattern? > Individual choices
CENTRAL QUESTION

- Focus on economic (grain) management
- Adaptations in four domains
  1. Production
  2. Consumption
  3. Commercialisation
  4. Surplus extraction
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ACCOUNTS FROM
3 HOSPITALS
1 ABBEY
1 COLLEGIATE CHURCH
ONLY ECCLESIASTICAL!

ADN, AH E VI 8 (n°9): L’hôpital Saint-Sauveur, compte 1359-1360.
GRAIN PRICES

CONSUMPTION + COMMERCIALISATION

GRAIN INCOME

SURPLUS EXTRATION
Presentation of preliminary results. Please do not cite or distribute.
Presentation of preliminary results. Please do not cite or distribute

Grain Prices
Grams of silver per hectolitre

High price periods:
- 1330
- 1342
- 1352
- 1360
- 1370
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METHODOLOGY

- Origins: direct exploitation, leases-in-kind, customary fixed rent
- Theoretical income ≠ real income (Certain expenses = available grain)
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**GRAIN INCOME**

**MAIN RESULT**

 › **Downward trend**, predates Black Death (!)
CONSUMPTION & COMMERCIALISATION
WHEAT
CONSUMPION

› **Stable** evolution
› **High** level Des Prés
› Impact 1360!

Less consumption St. Sauveur, Wetz, Des Prés
Changing strategy Our Lady

![Graph showing consumption trends over time for St. Sauveur, Des Prés, Wetz, Our Lady, and St. Julian.](chart.png)

Presentation of preliminary results. Please do not cite or distribute.
OATS

Animal fodder & beer brewing
More volatile
High level Des Prés Downward trend
St. Sauveur: use of leasehold income
Absent for Our Lady
Generally way more volatile

Dramatic drop Des Prés

St. Sauveur & St. Julian big players on the market

St. Julian: unique case of 1339
Sold less than wheat
Des Prés & St. Sauveur almost nothing
Similarly volatile
St. Julian: unique case of 1339
Our Lady: everything sold
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CONSUMPTION VS. COMMERCIALISATION

WHEAT — VISUALIZED

Guaranteed cash influx

Stable food provisioning
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CONSUMPTION VS. COMMERCIALISATION

WHEAT – VISUALIZED

Focus on consumption

Reduced sales in dearth years
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CONSUMPTION VS. COMMERCIALISATION

WHEAT – VISUALIZED

ST. JULIAN

- Guaranteed cash influx
- Stable food provisioning
Presentation of preliminary results. Please do not cite or distribute

CONSUMPTION VS. COMMERCIALISATION

WHEAT – VISUALIZED

- **Pre-1360**: primarily commercial focus
- **Post-1360**: more focus on food supply
- Collegiate church!

Our Lady

[Chart showing consumption and commercialization trends from 1300-1400]
Presentation of preliminary results. Please do not cite or distribute

**CONSUMPTION VS. COMMERCIALISATION**

**COEFFICIENTS OF CORRELATION**

**SIGNIFICANT CORRELATIONS**

› St. Sauveur (wheat):
  - Income

› Des Prés (wheat):
  - High CC with income
  - Negative with price

› St. Julian (oats):
  - Income

**FORMULA**

\[
\text{Correlation} \left( \frac{\text{Amount sold}}{\text{Amount consumed}}; \text{Price} \right)
\]

\[
\text{Correlation} \left( \frac{\text{Amount sold}}{\text{Amount consumed}}; \text{Minimum income} \right)
\]

<table>
<thead>
<tr>
<th>Wheat</th>
<th>St. Sauveur</th>
<th>Des Prés</th>
<th>Wetz</th>
<th>Our Lady</th>
<th>St. Julian</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Price</strong></td>
<td>Pearson correlation</td>
<td>-0.347</td>
<td>-0.292*</td>
<td>0.320</td>
<td>-0.124</td>
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<td>Sig. (2-tailed)</td>
<td>0.076</td>
<td>0.039</td>
<td>0.265</td>
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<td>N</td>
<td>27</td>
<td>50</td>
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<td><strong>Income</strong></td>
<td>Pearson correlation</td>
<td>0.599**</td>
<td>0.857**</td>
<td>0.321</td>
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<td>Sig. (2-tailed)</td>
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<td>50</td>
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<th>Oats</th>
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<th>St. Julian</th>
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<td><strong>Price</strong></td>
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<td><strong>Income</strong></td>
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CASH INFLUX
IS THERE A SIGN OF SPECULATION?

HIGHEST PROFITS FROM CEREAL SALES
AMOUNT OF SILVER EARNED THROUGH THE SALES OF WHEAT AND OATS IN THE FOURTEENTH CENTURY

Presentation of selected results for the Town of Audun-le-Notre.
CASH INFLUX
IS THERE A SIGN OF SPECULATION?

HIGHEST PROFITS FROM CEREAL SALES
› A lot during or just after high price periods!
   1330, 1343, 1352, 1360, 1370
› No clear speculating -> priority was on food provisioning!
Presentation of preliminary results. Please do not cite or distribute.
METHODOLOGY

› Need for detailed leasehold income & arrears: leniency towards tenants during dearth
  (Only for Our Lady)

› Possible analysis of:
  1. Total tenants (with debt)
  2. Total debt (of active tenants)
  3. Mobility of tenants
RESULTS

ACTIVE TENANTS WITH DEBT
› Avg. 29.1%
› Highest after crises
   1342-43: 71%
   1350-53: 62-65%
   Not after 1360!
› Dropped in last decades: 10-20%

AMOUNT OF DEBT VS. LEASE
› Avg. 68.5%
› Very high in 1343 & 1363/4 (115-122%) & last decades (>100%)
Last decades: most did pay, minority defaulted completely!

MOBILITY
› High: mortality or three-field system?
RESULTS

**ACTIVE TENANTS WITH DEBT**
- Avg. 36.5%
- Highest after crises
  - 1353-56: 63-68%
  - 1371-76: 75-57%
- Not after 1360!
- Dropped after 1385: 10-20%

**AMOUNT OF DEBT VS. LEASE**
- Avg. 109.7%
- 1390s: >300%
- Last decades: most did pay, minority defaulted completely!

**MOBILITY**
- High: mortality or three-field system?
CONCLUDING REMARKS

Domains of adaptation

› Production: different strategies → regional/institutional differences?
› Consumption: high priority
› Commercialisation: depends on available income & consumption
› Surplus extraction: lenient during dearth periods

Decision-making at the landowners level mattered!
Adaptations on the short term (D. Stone) vs. long term (reactions vs. 14th century crisis)

- Profound structural change (contraction grain economy) → predates Black Death

- Harvest failures ≠ price spikes → huge profits were made (no proof of speculation)

- Missing element = plague → not absent in this region

  Plague mortality did not disrupt grain economy