IV: Late-Medieval Agriculture: Changes in later-medieval European agrarian societies

Lecture 7:3 – D. Agrarian Changes in Late-medieval England: before and after the Black Death, 1290 – 1520

Revised: 30 October 2013
Agriculture in the English Economy before the Black Death

• (1) If one were to view the English economy before the Black Death, no one would guess that England would ultimately be the homeland of the modern Industrial Revolution

• (2) Its economy was then overwhelmingly agrarian: only about 5% - 10% urbanized: an economy far less urbanized, industrialized, and commercially advanced than many other European regions (especially Italy and Low Countries)

• (3) Its agriculture was far less advanced, productive than that of the Low Countries, or other parts of western Europe
SHEEP & WOOL in the English Medieval Economy

- (4) **SHEEP & WOOL**: however, provided English agriculture and the economy with **enormous advantages**:
  - a) **Late-medieval England** had Europe’s finest, highest quality wools (though with many grades, varieties):
    - i.e., before the later 16th - 17th century victory of the **Spanish merino wools**
  - b) also the largest flocks of sheep in medieval Europe: with about 8 – 10 million sheep vs. 4.5 to 5.0 million people in 1300
SHEEP & WOOL in the English Medieval Economy 2

• c) **wool** then accounted for at least 90% of the value of English exports

• - **until mid 15th century**, when woollen broadcloths finally overtook raw wool as the primary export

• - **1640s**: woollens still produced 92.5% of total export value
d) Sheep were a vital, integral part (with cattle) of England’s Mixed Husbandry in the Midlands Open Field farming systems: for reasons already noted.

e) Sheep, wool and then cloth export trades: determined the fortunes of English agriculture, trade, and industry throughout this era: single most component of the late-medieval English economy.
f) **Tudor Enclosures:** final topic in this lecture:

- **to be seen as a consequence of** demographic decline, manorial decline, and expansion of English cloth export trades: from 1460s to 1520s
Demographic Growth, ‘Crisis’, and agrarian changes, c. 1290-1315

• (1) The Boserup Model: *Population Growth and Technological Change* (1981): cited in last day’s online lecture (Flanders)

• Argued that historically, over much of the world, population growth and Law of Diminishing Returns have together provided the key incentives to technological changes in agriculture

(2) Last day’s lecture on agrarian changes in late-medieval Flanders: (online only): provided examples of the Boserup model: to increase productivity, per unit of land and unit of labour
Demographic Growth, ‘Crisis’, and agrarian changes, c. 1290-1315 (2)

- (2) Boserup model also found in England’s East Anglia: from ca. 1290 – ca. 1315 (era of Great Famine (1315-22):

- (3) Era of demographic growth, with increased population densities in East Anglia: (& the Midlands) to the Great Famine

- (4) question: did that population growth provide a spur to technological changes?
Agrarian changes in East Anglia: Norfolk & Suffolk, ca. 1300 (1)

• (1) similar changes as in Flanders: to reduce the fallow-
• - shift from grains to other crops
• - especially fodder crops: and stall feeding
• - heavy manuring of fields
• - row cultivation, with greater crop densities
• - intensive cultivation of more fields with cheap labour
• - but NO Convertible Husbandry, as in Flanders (topic for later consideration)

• (2) Also Battle Abbey (in Sussex, on south coast): similar intensive husbandry on some manors:
• those few that were entirely in demesne (domain)
Agrarian changes in East Anglia: Norfolk & Suffolk, ca. 1300 (2)

• (3) **Why was East Anglia then the locus of technical changes?**

  - **a)** weak manorialism and absence of Common Fields, or of fully developed Common Fields (wide variety in East Anglia)
  - **b)** individual peasant farming far more prominent
  - **c)** *partible inheritance, rapid population growth* → subdivided holdings: → cheap labour for intensive husbandry (& textile industries)
  - **d)** **transport and trade**: from coastal and overseas shipping, and development of markets and trading networks: to supply grain
Norfolk Cereal Yields
## Norfolk: Gross Crop Yields, in Bushels per Acre

### 1250 - 1740: 1250-74 = 100

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Norfolk Agriculture After the Black Death 1

• (1) **agricultural yields had peaked** in mid 14\textsuperscript{th} century

• (2) **After the Black Death yields fell: WHY?**
  • - **labour became too scarce** and expensive to permit such labour intensive husbandry
  • - **Land relatively far more abundant**, more productive lands left in production: to feed a much smaller population
Norfolk Agriculture After the Black Death 2

• So without ongoing or worsening demographic pressures:
  
  → farmers switched back to traditional Three-field systems (with 1/3 in fallow).

• Other evidence: general decline in productivity on arable lands after the Black Death:
  
  • contradicts Ricardo model (as seen before)
DAVID RICARDO (1772 - 1823)

ECONOMICS OF POPULATION DECLINE

(1) FALLING GRAIN PRICES:
- which would hurt those landlords operating commercial farms,
- but also hurt those peasants similarly producing grain surpluses for the markets.

(2) FALLING ECONOMIC RENTS:
- which would certainly hurt landlords,
- but also those peasants who had earlier managed to hold or to secure some portion of those economic rents produced by prior population growth

(3) RISING REAL WAGES: as a result of both:
(a) much more favourable land:labour ratio
- that should have increased the marginal productivity of labour
  (at least in agriculture, if not so obviously in industry)
- note: in Classical Theory, the Wage Rate = MRP_L, i.e., the Marginal Revenue Product of Labour
(b) falling food prices and land/housing rents:
- a fall in the cost of living, with falling food prices
- note: the real wage is calculated as: \( \frac{NW}{CPI} = RW \)
  i.e., the Nominal Wage Index (money wages in silver) divided by the Consumer Price Index (the money cost of a basket of consumables and services)
Prices and Wages after Black Death

(1) Evidence on wages and prices also contradicts the standard Ricardo model:
- all agricultural prices rose, not fell, in generation following the Black Death

- But in part: pure monetary inflation,
- nevertheless agricultural prices rose the most:
  \( \rightarrow \) indicates that manorial demesne farming -- Gutsherrschaft -- remained prosperous

(2) REAL wages fell, not rose, in immediate aftermath of Black Death: but chiefly because inflation outpaced the rise in nominal money wages
• (3) **Manorial wages, however, rose less than did urban wages:**

  - perhaps because of Ordinance (1349) and Stature of Labourers (1351)??

• - but rural wages rose above Statute rates: would they have risen even more without attempted enforcement of the Statute?

• (4) **Major Problem:** the dramatic decline of manorial demesne agriculture did not happen for another thirty years, before 1370s: i.e. that shift from Gutsherrschaft to Grundherrschaft
Prices of English Agricultural Commodities in Index Numbers (1451-75=100)
Phelps Brown & Hopkins Consumer Price Index, Price Indices for Grains (wheat, rye, barley, peas), Wools (better quality) Meats (Beef, Mutton, Pork), Dairy (butter, cheese).
Farmer's 'National' Wages for English Manorial Agricultural Workers:
the Phelps Brown & Hopkins CPI
Nominal and Real Wages for Threshers/Winnowers and for Reapers/Binders
in quinquennial means, 1331-35 to 1446-50
mean of 1451-75 = 100
English Craftsmen's Wages (Urban):
Master Masons: Phelps Brown and Hopkins series
Phelps Brown and Hopkins CPI
nominal and real wages for master masons
Mean of 1451-75 = 100
Farmer's National Wages for English Manorial Craftsmen: the Phelps Brown & Hopkins CPI
Nominal and Real Wages for Carpenters and Thatchers in quinquennial means, 1331-35 to 1446-50
mean of 1451-75 = 100
Problem of the Time-Lag (1): 1348 to 1370s: ‘Mind the Gap!’

1. Bridbury’s Demographic Explanation (1973):
   - ‘The Black Death was quite incapable of altering the social and economic relationships ... because so much of the population was surplus by the fourteenth century that the early famines and mid-century pestilences were more purgative than toxic.’
   - Cites W. Arthur Lewis on ‘unlimited supplies of labour’ in which the MP of labour is either zero or even negative.
   - Not until the 1370s (evidently) did population decline become severe enough to ‘activate’ the Ricardian model.
   - Is this interpretation credible in terms of both theory and fact?
   - Bridbury contradicts himself: in later article on pre BD England, denying any overpopulation and any Malthusian crisis.
The Time-Lag Problem (2): 1348 to 1370s: ‘Feudal Reaction’ Thesis

(2) The ‘Feudal Reaction’ Hypothesis

Demographic/Institutional Model:
See: the Marc Bloch model on rise or expansion of serfdom:
That, in reaction to declining population and consequent labour scarcities, manorial lords used their coercive powers to impose or strengthen serfdom (labour services)
- to prevent peasants from exercising potential market powers
- to drive up wages and
- to drive down rents.
The Time-Lag Problem (2): 1348 to 1370s: ‘Feudal Reaction’ Thesis 2

- (3) **Statute of Labourers (1350):** did wage controls restrict supply of free wage-labour → need to extract more servile labour?

- **But depends on not only lords’ military and judicial powers** -- but also on costs of enforcing an expansion in servile obligations.

- (4) **Peasant Uprising of 1381:** Wat Tyler Revolt

- **Evidence for this ‘feudal reaction’ and its failure??** see last day’s lecture on this same topic
Wat Tyler’s death: London, 1381
Monetary/fiscal model: for decline of demesne agriculture

- offered as a supplementary explanation, to the Ricardo model

- which also helps to explain:
  - (a) the long time-lag between the catastrophe of the Black Death (1348) and
  - (b) the much later ‘collapse’ of demesne agriculture (direct cultivation): from the 1370s to the 1420s (approximately)
  - (c) and also: the decline of English serfdom from 1370s
My monetary model (1)

- First part of the model: based on my earlier publications on money, prices and wages during the ‘bullion famine’ era of ca. 1370- ca. 1420,
- contends that the steep fall in agricultural commodity prices,
- along with a lesser fall in industrial prices,
- constituted genuine monetary deflation:
- a 25% decline in the Consumer Price Index
- See a graph for the ‘bullion famine’ ca. 1370-1420
Mint Outputs of England & Flanders/LC
1346 - 1500 in constant £ sterling:

- English Mint Outputs: constant £
- Flanders/LC mint outputs: constant £
- English Trend Line
- Flanders/LC Trend Line
My monetary model (2)

• Problem with the Ricardian demographic model:
  • the logic of the ‘real’ demographic model – as explained here – is that a fall in grain prices, produced by real factors,
  • would have liberated more consumer income to be spent on livestock products (meat, dairy products, leather, woollen textiles, etc),
  • thus raising their prices (nominal or relative?).
  • yet the fall in wool prices (42%) and other livestock prices (35%) was commensurate with the fall in grain prices (39%)
Prices of English Agricultural Commodities in Index Numbers (1451-75=100)
Phelps Brown & Hopkins Consumer Price Index, Price Indices for
Grains (wheat, rye, barley, peas), Wools (better quality)
Meats (Beef, Mutton, Pork), Dairy (butter, cheese).

[Graph showing price indices for various commodities over time]
Monetary Model: Factor Prices

- The next part of the model: deals with real factor prices: for labour and capital
- (1) undisputed fact that at least their nominal prices, in terms of wages and interest, did not fall during this era (experienced ‘wage stickiness’)
- (2) and thus that these real costs rose severely for most manorial lords, ca. 1370-ca.1420
- i.e., during the deflationary ‘bullion famine’ era.
Farmer’s ‘National’ Wages for English Manorial Agricultural Workers:
the Phelps Brown & Hopkins CPI
Nominal and Real Wages for Threshers/Winnowers and for Reapers/Binders
in quinquennial means, 1331-35 to 1446-50
mean of 1451-75 = 100
Builders' Labourers: Nominal and Real Wages
1331-35 to 1446-50 in 5 year means
mean of 1451-75 = 1

- Consumer Price Index
- Nominal Wage Index
- Real Wage Index
My Fiscal Model: Taxation of the Wool Export Trade (1)

- The final part of the model deals with fiscal policies: royal taxation of English wool exports:
  - (1) **Problem of the English Wool Export Trade:**
  - (a) as noted, England produced Europe’s finest wools (before the 17th century): voracious demand from continental cloth producers:
    - Low Countries, northern France and Italy
  - (b) **Structural shifts in international trade from the 1330s (from warfare) had momentous consequences:** to be explained in later Trade lecture
My Fiscal Model: Taxation of the Wool Export Trade (2)

- (2) **Structural shifts in international trade**-promoted the relative growth in commerce in luxury products,
- (a) at expense of long-distance trade in cheaper products: especially in textiles
- (c) that shift favoured the luxury woollen cloth producers in Italy and the Low Countries – **but also** Italian silk textile producers
- (d) that shift thus also favoured English wool trade
Taxation of the Wool Export Trade (3)

• (3) **WOOL TAXATION:** Kings of England responded by extorting royal rents from the wool trade:
  - **1275:** taxation had begun modestly under Edward I, @ 6s 8d per sack of wool (364 lb): just under 5%
  - **1337:** Outbreak of Hundred Years War:
    - **Edward III** raised the wool export taxes and ‘subsidy’: to 40s per sack -- and more by mid 1340s
  - initially the English wool growers – landed gentry, nobles, Church bore the tax incidence - in lower wool prices
  - Parliamentary protests against royal wool-export taxes
  - **N.B. ratio of wool prices** to grains prices and CPI fell to 1360s
Taxation of Wool Export Trade (4)

- **(4) The Calais Wool Staple: 1363 - 1558**
  - Solution was found in creation of a royal export monopoly: establishment of the Company of the Merchants Staplers at Calais: French port that Edward III’s armies captured in 1347 (held to 1558)
  - Wool merchants’ cartel organized to pass the tax incidence onto foreign buyers: chiefly in the Low Countries: though not fully effective until 1390s

- **(5) Italians who shipped wool by sea:** from Southampton to Mediterranean were exempt from the Staple
  - but the Italians paid far higher export taxes than did English merchants in shipping wools abroad
Taxation of Wool Export Trade (5)

- (5) **Wool-Export Tax Problems:** their impact
- the wool export taxes were ‘specific’ (fixed) and not *ad valorem* (i.e., not by percentage value)
- Thus the tax burden thus rose sharply with deflation (the fall in wool-prices) – taxes rose from 31% of value of wool exports in 1371-75 to 50%, by 1391-95 (mean)
- (6) **For the chief customers, in the Low Countries:**
  - the Flemish and Brabantine woollen draperies: these highly taxed English wools then constituted about 60%-70% of their textile production costs
Demand for wool was not inelastic derived from demand for luxury woollens, which was quite elastic, with \( \Delta \) competition from silk fabrics: chief threat to luxury woollens.

Result: rapid decline of the Low Countries’ urban draperies producing luxury woollens (further internal reasons: explored later).

The fate of the English wool trade: 1370-1420

- During this period, the wool export trade fell 61% in volume: only partially offset by the corresponding rise of the English cloth trade.
Taxation of Wool Export Trade (7)

• (10) **Flemish and Brabantine woollen draperies** – cloth production indices, 1370 – 1420 - fell at least 80% (based on tax farms)

• (11) **Corresponding rise & expansion of the English cloth trade, from the 1360s:**
  - result of growing taxation of wool, and decline of Low Countries’ urban draperies:
  - because English cloth exports taxed only **lightly** (about 2%-3%, vs. 40%-50% for wool)
Prices of English Agricultural Commodities in Index Numbers (1451-75=100)

Phelps Brown & Hopkins Consumer Price Index, Price Indices for
Grains (wheat, rye, barley, peas), Wools (better quality)
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<td>161.343</td>
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<td>1381-85</td>
<td>109.103</td>
<td>118.711</td>
<td>83.923</td>
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<td>89.794</td>
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<td>103.191</td>
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<td>73.719</td>
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<td>1416-20</td>
<td>83.264</td>
<td>82.922</td>
<td>93.405</td>
<td>90.347</td>
<td>108.954</td>
</tr>
<tr>
<td>1421-25</td>
<td>104.625</td>
<td>114.252</td>
<td>74.137</td>
<td>98.120</td>
<td>85.881</td>
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<td>96.340</td>
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<td>92.874</td>
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<td>105.021</td>
<td>86.681</td>
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<td>1436-40</td>
<td>88.254</td>
<td>73.810</td>
<td>120.664</td>
<td>73.783</td>
<td>99.962</td>
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<td>1441-45</td>
<td>115.740</td>
<td>141.908</td>
<td>53.885</td>
<td>127.972</td>
<td>90.180</td>
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Price Indexes for Wools with Index Numbers and the Phelps Brown and Hopkins Composite Price with export duties per wool sack

Price Index, in quinquennial means: from 1331-35 to 1446-50

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean Price Sack Better Wools</th>
<th>Index 1451-75 =100 £4.8544</th>
<th>Phelps Brown &amp; Hopkins CPI 1451-75 =100</th>
<th>Denizen Export Duties on Wool Sacks in shillings</th>
<th>Denizen Export Duties as Per Cent of Wool Prices</th>
<th>Alien Export Duties on Wool Sacks in shillings</th>
<th>Alien Export Duties as Per Cent of Wool Prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1336-40</td>
<td>4.646</td>
<td>95.699</td>
<td>89.256</td>
<td>29.556</td>
<td>31.81%</td>
<td>41.501</td>
<td>44.67%</td>
</tr>
<tr>
<td>1341-45</td>
<td>4.947</td>
<td>101.910</td>
<td>85.533</td>
<td>40.247</td>
<td>40.68%</td>
<td>43.333</td>
<td>43.80%</td>
</tr>
<tr>
<td>1346-50</td>
<td>4.713</td>
<td>97.093</td>
<td>100.064</td>
<td>40.000</td>
<td>42.43%</td>
<td>43.333</td>
<td>45.97%</td>
</tr>
<tr>
<td>1351-55</td>
<td>4.446</td>
<td>91.577</td>
<td>126.472</td>
<td>40.000</td>
<td>44.99%</td>
<td>43.333</td>
<td>48.74%</td>
</tr>
<tr>
<td>1356-60</td>
<td>5.243</td>
<td>108.009</td>
<td>118.092</td>
<td>40.000</td>
<td>38.14%</td>
<td>43.333</td>
<td>41.32%</td>
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<tr>
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<td>5.606</td>
<td>115.474</td>
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<td>46.110</td>
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<td>1366-70</td>
<td>6.689</td>
<td>137.799</td>
<td>136.460</td>
<td>46.667</td>
<td>34.88%</td>
<td>50.000</td>
<td>37.37%</td>
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<tr>
<td>1371-75</td>
<td>7.895</td>
<td>162.637</td>
<td>127.345</td>
<td>50.000</td>
<td>31.67%</td>
<td>53.333</td>
<td>33.78%</td>
</tr>
<tr>
<td>1376-80</td>
<td>7.536</td>
<td>155.243</td>
<td>109.891</td>
<td>50.000</td>
<td>33.17%</td>
<td>53.333</td>
<td>35.38%</td>
</tr>
<tr>
<td>1381-85</td>
<td>5.995</td>
<td>123.494</td>
<td>113.190</td>
<td>50.000</td>
<td>41.70%</td>
<td>53.333</td>
<td>44.48%</td>
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<tr>
<td>1386-90</td>
<td>5.071</td>
<td>104.463</td>
<td>101.233</td>
<td>48.516</td>
<td>47.84%</td>
<td>52.166</td>
<td>51.43%</td>
</tr>
<tr>
<td>1391-95</td>
<td>4.953</td>
<td>102.039</td>
<td>103.953</td>
<td>49.830</td>
<td>50.30%</td>
<td>53.163</td>
<td>53.66%</td>
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<tr>
<td>1396-1400</td>
<td>5.241</td>
<td>107.966</td>
<td>110.648</td>
<td>50.000</td>
<td>47.70%</td>
<td>56.555</td>
<td>53.95%</td>
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<td>1401-05</td>
<td>5.702</td>
<td>117.455</td>
<td>112.653</td>
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<td>44.89%</td>
<td>61.187</td>
<td>53.66%</td>
</tr>
<tr>
<td>1406-10</td>
<td>6.219</td>
<td>128.114</td>
<td>109.927</td>
<td>50.000</td>
<td>40.20%</td>
<td>60.000</td>
<td>48.24%</td>
</tr>
<tr>
<td>1411-15</td>
<td>5.954</td>
<td>122.651</td>
<td>108.261</td>
<td>50.000</td>
<td>41.99%</td>
<td>60.000</td>
<td>50.39%</td>
</tr>
<tr>
<td>1416-20</td>
<td>4.592</td>
<td>94.586</td>
<td>113.598</td>
<td>50.000</td>
<td>54.45%</td>
<td>68.000</td>
<td>74.05%</td>
</tr>
<tr>
<td>1421-25</td>
<td>5.269</td>
<td>108.538</td>
<td>103.740</td>
<td>43.841</td>
<td>41.60%</td>
<td>62.658</td>
<td>59.46%</td>
</tr>
<tr>
<td>1426-30</td>
<td>5.015</td>
<td>103.298</td>
<td>112.610</td>
<td>40.000</td>
<td>39.88%</td>
<td>53.333</td>
<td>53.18%</td>
</tr>
<tr>
<td>1431-35</td>
<td>5.613</td>
<td>115.634</td>
<td>109.122</td>
<td>40.000</td>
<td>35.63%</td>
<td>57.103</td>
<td>50.86%</td>
</tr>
<tr>
<td>1436-40</td>
<td>5.322</td>
<td>109.627</td>
<td>124.218</td>
<td>40.000</td>
<td>37.58%</td>
<td>62.267</td>
<td>58.50%</td>
</tr>
<tr>
<td>1441-45</td>
<td>5.201</td>
<td>107.145</td>
<td>92.574</td>
<td>40.000</td>
<td>38.45%</td>
<td>63.333</td>
<td>60.88%</td>
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<tr>
<td>1446-50</td>
<td>5.379</td>
<td>110.796</td>
<td>101.241</td>
<td>40.000</td>
<td>37.19%</td>
<td>63.333</td>
<td>58.88%</td>
</tr>
</tbody>
</table>
English Wool Exports in sacks (364 lb)
in 5 year means, 1331-35 to 1446-50
Exports of English Woolsacks and Broadcloths:
in Quinquennial Means, 1301-05 to 1496-1500
Values of the Excise Tax Farms for the Ghent and Mechelen Draperies in shillings groot (Ghent) and pounds oude groot (Mechelen) in quinquennial means, 1331-35 to 1456-50
Drapery Excise Tax Farms for Mechelen (pounds oude groot), and Leuven (in Rijngulden), and Ypres (in pounds groot Flemish), and the number of drapery stalls rented in the Ypres Lakenhalle in quinquennial means 1401-05 to 1476-80
Estimates of Florentine Woollen Cloth Outputs: using English wools

<table>
<thead>
<tr>
<th>Year</th>
<th>Cloth Outputs: bolts of 36 metres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1338</td>
<td>75,000</td>
</tr>
<tr>
<td>1355-73 (annual mean)</td>
<td>49,000</td>
</tr>
<tr>
<td>1373</td>
<td>30,000</td>
</tr>
<tr>
<td>1382</td>
<td>19,926</td>
</tr>
<tr>
<td>1389</td>
<td>16,482</td>
</tr>
<tr>
<td>1390</td>
<td>10,000</td>
</tr>
<tr>
<td>1392</td>
<td>12,690</td>
</tr>
<tr>
<td>1395</td>
<td>13,672</td>
</tr>
<tr>
<td>1425</td>
<td>9,052</td>
</tr>
<tr>
<td>1430</td>
<td>10,049</td>
</tr>
<tr>
<td>1433</td>
<td>8,333</td>
</tr>
</tbody>
</table>
The Role of the Italians (Aliens) in the Exports of English Wools (in sacks) in quinquennial means, 1301-05 to 1496-1500

<table>
<thead>
<tr>
<th>Year from Michaelmas 5 year means</th>
<th>Denizen Wool Exports</th>
<th>Percent Total</th>
<th>Alien Wool Exports</th>
<th>Percent Total</th>
<th>Total Wool sacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1301-05</td>
<td>23,041.60</td>
<td>59.30%</td>
<td>15,974.60</td>
<td>40.70%</td>
<td>32,344.00</td>
</tr>
<tr>
<td>1306-10</td>
<td>17,888.87</td>
<td>70.76%</td>
<td>7,108.73</td>
<td>29.24%</td>
<td>24,997.60</td>
</tr>
<tr>
<td>1311-15</td>
<td>24,633.00</td>
<td>72.97%</td>
<td>9,012.60</td>
<td>27.03%</td>
<td>33,645.60</td>
</tr>
<tr>
<td>1316-20</td>
<td>13,180.00</td>
<td>69.44%</td>
<td>7,344.80</td>
<td>30.56%</td>
<td>20,524.80</td>
</tr>
<tr>
<td>1321-25</td>
<td>10,565.51</td>
<td>58.09%</td>
<td>7,510.07</td>
<td>41.91%</td>
<td>18,075.58</td>
</tr>
<tr>
<td>1326-30</td>
<td>10,169.40</td>
<td>34.39%</td>
<td>20,581.00</td>
<td>65.61%</td>
<td>30,750.40</td>
</tr>
<tr>
<td>1331-35</td>
<td>16,345.60</td>
<td>56.81%</td>
<td>10,106.20</td>
<td>43.19%</td>
<td>26,451.80</td>
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<tr>
<td>1336-40</td>
<td>16,712.02</td>
<td>64.39%</td>
<td>9,155.78</td>
<td>35.61%</td>
<td>25,867.80</td>
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<tr>
<td>1341-45</td>
<td>18,898.00</td>
<td>82.67%</td>
<td>3,572.20</td>
<td>17.33%</td>
<td>20,470.20</td>
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<tr>
<td>1346-50</td>
<td>13,886.80</td>
<td>78.97%</td>
<td>3,630.60</td>
<td>21.03%</td>
<td>17,517.40</td>
</tr>
<tr>
<td>1351-55</td>
<td>15,574.20</td>
<td>80.07%</td>
<td>3,737.80</td>
<td>19.93%</td>
<td>19,312.00</td>
</tr>
<tr>
<td>1356-60</td>
<td>13,593.20</td>
<td>72.00%</td>
<td>4,920.60</td>
<td>28.00%</td>
<td>18,513.80</td>
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<tr>
<td>1361-65</td>
<td>14,515.80</td>
<td>86.15%</td>
<td>2,373.80</td>
<td>13.85%</td>
<td>16,889.60</td>
</tr>
<tr>
<td>1366-70</td>
<td>11,803.40</td>
<td>91.57%</td>
<td>1,100.80</td>
<td>8.43%</td>
<td>12,904.20</td>
</tr>
<tr>
<td>1371-75</td>
<td>13,392.80</td>
<td>89.41%</td>
<td>1,575.40</td>
<td>10.59%</td>
<td>14,968.20</td>
</tr>
<tr>
<td>1376-80</td>
<td>12,633.20</td>
<td>92.72%</td>
<td>960.00</td>
<td>7.28%</td>
<td>13,593.20</td>
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<tr>
<td>1381-85</td>
<td>13,355.40</td>
<td>92.98%</td>
<td>1,009.60</td>
<td>7.02%</td>
<td>14,365.00</td>
</tr>
<tr>
<td>1386-90</td>
<td>13,363.60</td>
<td>93.77%</td>
<td>881.60</td>
<td>6.23%</td>
<td>14,245.20</td>
</tr>
</tbody>
</table>
The reaction of English manorial lords to falling prices:1

• (1) **Note:** ALL agricultural prices fell from the 1370s
  but grain prices fell more than livestock prices: for wool, meat, dairy products; wool prices more so than meat prices

• (2) some manorial lords were able to survive by switching from both arable and wool-oriented sheep-raising:
  to the production of other livestock products

• (3) **Bruce Campbell’s agrarian statistics:** indicate that many lords did shift their demesne production more and more from arable (grains) to livestock products, other than wools

• (4) **My statistics indicate good reason to do so:** a shift in *relative* prices against grains and wool production-
  in favour of producing other livestock products: meat (mutton, beef, swine), dairy products (butter, cheese, milk), leather (hides) – such prices did not fall as much as grain/wool prices
Agricultural English Price Ratios: Ratios of the Index Numbers for Wools, Grains, Meats, and Dairy Products to the Phelps Brown and Hopkins Consumer Price Index, and to Each Other (selected groups) in quinquennial means, 1331-35 to 1446-50

mean of 1451-75 =
The Reaction of English Manorial Lords to Adversities: 2

• (1) Many English manorial lords were not able to effect this transformation, which required more capital
• (2) Their problems: they were faced with a serious price-cost scissors
  • rising real labour costs – so important in grain cultivation
  • and rising capital costs: real interest rates
  • and with sharply falling prices for almost all agricultural products, and
• (3) Wool Sales: possibly even steeper declines
  • since the evidence does not indicate that wool sales to domestic clothiers even came close to compensating for falling sales to the Calais Staple merchants
The Manorial shift to Grundherrschaft

• (1) Many English manorial lords – possibly more so ecclesiastical than lay -- found a much better economic solution in leasing their demesnes,

• with a shift to Grundherrschaft:

• (2) Which thus meant leasing their demesne lands, for fixed cash rents, without requiring any servile labour obligations: leases of 7, 10, 20, or 99 years

• (3) Their real gains:

• received fixed rental incomes, often for long terms, whose real value thus rose with deflation.
Reaction of Manorial Tenants: 2

(1) The late-medieval English peasantry: gains or losses?

The burden of rising wages and falling prices for grains and wools was thus transferred to their peasant tenants who probably still welcomed more land to work and more personal freedom, both economic and personal, a fair ‘trade-off’ for the ‘end of serfdom’.

(2) Peasants who evidently benefited the most:

were those with the best access to capital, though they also faced problems of higher cost capital.

(3) Chief capital requirement: for livestock (cattle, sheep, pigs, goats)
Extent of Manorial Contraction

• (1) **Varied regionally:**
  • - **weakest in the North:** less manorialized, and more pastoral farming (already)
  • - **strongest in the South**
  • - **about average in the Midlands:**
• (2) **overall statistics:** contraction of about 30% in manorial demense agriculture, compared to perhaps 50% decline in the population
• (3) **with demesne leasing, many landlords had their remaining demesne strips amalgamated into the village Open Fields:** for gains in both communal ploughing & manuring (as noted before)
Changes in Arable Crop Production

• (1) **Statistics of Bruce Campbell:** on changes in arable crops production on demesne after the Black Death
  
  • (a) **rye (winter fields) and oats (spring fields):** very significant reduction in cultivation
  
  • (b) **winter wheat:** very slight decline
  
  • (c) **barley (brewing) and legumes (spring):** experienced **biggest relative increase:**

• (2) **Ramsey Abbey estates (north):** relative decline in both rye and wheat production, and relative rise in both barley and legumes

• (3) **no evidence of increased fertility and land productivity** from growing more legumes – peas and beans weak in nitrogen

• (4) **Grain Yields and Arable Productivity:** on average, fell in century following the Black Death
  
  – did not rise, as Ricardo model predicts
Norfolk: Gross Crop Yields, in Bushels per Acre

1250 - 1740: 1250-74 = 100

<table>
<thead>
<tr>
<th>Years</th>
<th>Wheat</th>
<th>Rye</th>
<th>Barley</th>
<th>Oats</th>
<th>W.A.G.Y.</th>
<th>Index</th>
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<td>1250 - 74</td>
<td>13.2</td>
<td>8.8</td>
<td>15.7</td>
<td>13.5</td>
<td>9.3</td>
<td>100</td>
</tr>
<tr>
<td>1275 - 79</td>
<td>14.9</td>
<td>10.3</td>
<td>15.8</td>
<td>13.8</td>
<td>10.3</td>
<td>111</td>
</tr>
<tr>
<td>1300 - 24</td>
<td>14.9</td>
<td>10.0</td>
<td>16.1</td>
<td>13.3</td>
<td>11.0</td>
<td>118</td>
</tr>
<tr>
<td>1325 - 49</td>
<td>15.6</td>
<td>10.5</td>
<td>17.2</td>
<td>15.0</td>
<td>11.9</td>
<td>127</td>
</tr>
<tr>
<td>1350 - 74</td>
<td>11.4</td>
<td>8.9</td>
<td>15.3</td>
<td>11.9</td>
<td>8.6</td>
<td>92</td>
</tr>
<tr>
<td>1375 - 99</td>
<td>12.9</td>
<td>10.1</td>
<td>17.3</td>
<td>14.0</td>
<td>9.7</td>
<td>104</td>
</tr>
<tr>
<td>1400 - 24</td>
<td>12.7</td>
<td>9.9</td>
<td>14.9</td>
<td>13.9</td>
<td>8.0</td>
<td>86</td>
</tr>
<tr>
<td>1425 - 49</td>
<td>10.7</td>
<td>12.0</td>
<td>15.4</td>
<td>14.5</td>
<td>8.9</td>
<td>96</td>
</tr>
<tr>
<td>PLACE</td>
<td>Crops</td>
<td>From 1250 to 1349</td>
<td>From 1350 to 1449</td>
<td>Percent Change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>----------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGLAND</td>
<td>Wheat</td>
<td>33.70</td>
<td>30.40</td>
<td>-9.79%</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Rye</td>
<td>4.90</td>
<td>2.90</td>
<td>-40.82%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>counties</td>
<td>Barley</td>
<td>15.00</td>
<td>22.60</td>
<td>50.67%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oats</td>
<td>31.30</td>
<td>23.50</td>
<td>-24.92%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mixed Grains</td>
<td>6.40</td>
<td>6.20</td>
<td>-3.13%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Legumes</td>
<td>8.70</td>
<td>14.10</td>
<td>62.07%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean Total Sown Acres</td>
<td>188.60</td>
<td>151.60</td>
<td>-19.62%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No. of Demesnes</td>
<td>473.00</td>
<td>308.00</td>
<td>-34.88%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FTC *</td>
<td>Wheat</td>
<td>32.90</td>
<td>32.10</td>
<td>-2.43%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COUNTIES</td>
<td>Rye</td>
<td>6.10</td>
<td>2.20</td>
<td>-63.93%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Barley</td>
<td>10.70</td>
<td>18.40</td>
<td>71.96%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[1288-1315]</td>
<td>Oats</td>
<td>30.40</td>
<td>22.50</td>
<td>-25.99%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mixed Grains</td>
<td>10.50</td>
<td>10.20</td>
<td>-2.86%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Legumes</td>
<td>9.40</td>
<td>14.60</td>
<td>55.32%</td>
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</tr>
</tbody>
</table>
Evidence for declining labour productivity (David Stone)
Evidence for declining labour productivity (David Stone)- 2
Was there a shift from arable to livestock agriculture from 1370s?

• (1) Eileen Power, *Wool Trade in English Medieval History* (1941): ‘It is difficult to find signs of that wholesale substitution of pasture for arable farming which, according to textbooks, happened after the Black Death.’ Repeated in many textbooks since then

• (2) But, as noted above, the behavior of relative prices does show a relative shift in favour of other livestock prices

• (3) Evidence for rising productivity in pastoral farming (opposite of arable): meaning that fewer men were required to manage herds and flocks per acre
Was there a shift from arable to livestock agriculture from 1370s?

- (4) ENGELS LAW:
  - With rising real wages and perhaps other incomes from the 1370s, and falling grain prices, we expect to find a relative shift in disposable income and thus in demand
  - \( \rightarrow \) to favour production and consumption of various livestock products (and other non-grain arable crops)
  - i.e., meat, dairy products (milk, butter, cheese), leather (hides) and even wool, for domestic textile consumption

- (5) Bruce Campbell’s statistics:
  - relative increase in manorial incomes from livestock products
  - reflected in increased livestock ratios: ‘stocking ratios’
## Land Use in Terms of Arable and Livestock in Manorial Demesne Agriculture

<table>
<thead>
<tr>
<th>Years</th>
<th>ENGLAND: Manorial (Seigniorial) Demesne Lands</th>
<th>Norfolk: Manorial (Seigniorial) Demesne Lands</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean Cropped Areas:</td>
<td>Mean Stocking Densities per 100 grain acres</td>
</tr>
<tr>
<td></td>
<td>Sown Acres</td>
<td>Grain Acres</td>
</tr>
<tr>
<td></td>
<td>Sown Acres</td>
<td>Grain Acres</td>
</tr>
<tr>
<td>1250 - 1299</td>
<td>189.20</td>
<td>176.70</td>
</tr>
<tr>
<td>1300 - 1349</td>
<td>172.10</td>
<td>155.70</td>
</tr>
<tr>
<td>1350 - 1399</td>
<td>147.10</td>
<td>124.90</td>
</tr>
<tr>
<td>1400 - 1450</td>
<td>142.80</td>
<td>117.40</td>
</tr>
</tbody>
</table>

¹ All Livestock: Number of livestock units on all land;
³ Non-Working Livestock: Number of livestock units on non-working land;
⁵ All Non-Working Livestock: Number of livestock units on all non-working land.
Relative Contributions of Arable Crops and Livestock to Estimated Gross Revenues of the Manorial Demesne Economics within the FTC counties of southern England: 1288-1315 and 1375-1400

<table>
<thead>
<tr>
<th>Period</th>
<th>No. of Manors</th>
<th>Percentage of Gross Revenues from:</th>
<th>Mean Gross Revenues in £ sterling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Crops</td>
<td>Livestock</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1288 - 1315:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conventual and Collegiate Manors</td>
<td>111</td>
<td>54.70</td>
<td>45.30</td>
</tr>
<tr>
<td>Episcopal Manors</td>
<td>18</td>
<td>71.30</td>
<td>28.70</td>
</tr>
<tr>
<td>Lay Manors</td>
<td>31</td>
<td>71.10</td>
<td>28.90</td>
</tr>
<tr>
<td>Royal Manors</td>
<td>43</td>
<td>66.70</td>
<td>33.30</td>
</tr>
<tr>
<td>TOTAL</td>
<td>203</td>
<td>64.40</td>
<td>35.60</td>
</tr>
</tbody>
</table>

1375 - 1400:

| Conventual and Collegiate Manors | 88 | 45.30 | 54.70 | 27.09 |
| Episcopal Manors | 13 | 51.60 | 48.40 | 42.24 |
| Lay Manors    | 38 | 46.00 | 54.00 | 29.03 |
| Royal Manors  | 2 | 65.20 | 34.80 | 14.72 |
| TOTAL        | 141 | 47.80 | 52.20 | 28.87 |

FTC: Feeding the City (of London) Counties: Bedfordshire, Berkshire, Buckinghamshire, Essex, Hertfordshire, Kent, Middlesex, Northamptonshire, Oxfordshire, Surrey
Peasant Obstacles to increasing livestock production in 15th century

• (1) livestock raising required:
• **large capital investments**: in livestock herds/flocks, breeding stock, fencing, etc.
• **large amounts of land:**
• (2) Most English peasants lacked ready access to both capital and land
• (3) **Barriers of manorial and Open Field or Common Field agriculture**: made breeding impossible
• (4) **No northern counterparts to Mediterranean agricultural contracts for capital**: *mezzadria & census*
Early Tudor Enclosures: 1460 - 1520

• (1) **Definitions of enclosures**
  - placing land under single management: whether by owner-occupiers or tenants
  - → thus total elimination of communal land rights and land use

• -(2) **undertaken by either:**
  • the manorial lord or by aggressive tenants:
  • usually in gradual, piece-meal forms – rarely was a manor fully enclosed, at any one time

• - (3) **a shift from Grundherrschaft back to Gutsherrschaft?**  Answer, next term
Early Tudor Enclosures: 1460 – 1520 (2)

• (1) Forms of Enclosures: for exclusive use of lord or a tenant
  • a) enclosures of the village Commons: fencing off pasture lands for use of landlord or his tenant (‘keep off the grass’)
  • b) engrossing of the arable open fields: consolidations of scattered tenancies in form of interspersed plough strips
  • c) reclamation of marshes, fens, wastelands: into either pasture or arable lands (socially beneficial form of enclosures)

• (2) The first two forms of enclosures:
  • usually meant the eviction of remaining peasant tenants: -
  • chiefly in the Midlands zone of England (see map)
OPEN OR COMMON FIELDS
WITH THREE-COURSE CROP ROTATIONS
("THREE FIELD" SYSTEM WITH FALLOW)

DOMAIN (DEMESNE) LANDS

WOODLANDS
Forest

VILLAGE Commons
Livestock Grazing

FALLOW
(Uncultivated)

WHEAT, RYE
Crops

BARLEY, OATS, PEAS, BEANS
Spring-Summer Crops
ENCLOSURE circa 1600

- Over 70% enclosed
- 50-70% enclosed
- Eastern limit of Midland system
- Land over 245 metres (800 feet)
- Main areas of marsh

100 Kms

Fig. 5.4 Enclosure circa 1600
Tudor Enclosures: in and beyond the Midlands zone

• (1) Most enclosures in late-medieval, early-modern England took place peacefully, OUTSIDE the Midlands, as indicated on previous map: in areas that were:
  • a) already pastoral (for sheep or cattle raising)
  • b) in zones of non-manorial independent peasant farming: in severalty, not in communal farming
  • c) thinly settled
• 2) East Anglia and Home Counties: see the map
  • a) became densely populated, but largely non feudal, non-manorial, non-communal
  • b) voluntary enclosures: with little peasant resistance
The Midlands: Socially Disruptive Enclosures

• (3) Why were enclosures in the Midlands socially disruptive (esp. in the 16th century)? - peasant resistance

• a) Major region of ‘Mixed Husbandry’: equally suitable for grain and sheep raising \(\rightarrow\) conversion of arable to pasture

• b) Region with one of densest populations in England

• c) most highly feudalized and manorialized region

• d) thus region of classic Open Field communal farming:

• Brenner thesis: that communal Open Field farming was a peasant-determined system to resist manorial exploitation:

• e) thus peasant resistance to enclosures undertaken by manorial landlords or their chief tenants
Demographic/Economic Models to Explain Enclosures - 1

• (1) Demography: the role of continuing population decline
• - NOTE: most textbooks still try to explain enclosures as a reaction to population growth & diminishing returns
• - see the Boserup and Thirsk models
• - but this view is false: because population continued to decline during the entire era of the early Tudor enclosures: from the 1460s to the 1520s:
Demographic/Economic Models to Explain Enclosures - 2

• (2) The Beresford-Blanchard Model of Enclosures

• -a) continuous population decline had meant too many vacated tenancies by the 1450s: even if landlords preferred to maintain tenants on arable open fields,

• -b) thus better choice to lease large blocks of vacated tenancy lands to tenants who would maintain flocks of sheep

• than having the land lie unproductive, with no rents
Additional demographic arguments (not favoured by the B-B model)

- depopulation and alteration of land:labour ratio: had made labour too scarce and costly for land-intensive arable farming - especially with declining productivity in arable agriculture
- livestock farming is land extensive and requires little labour: land now abundant, with evidence of rising labour productivity in pastoral farming
- price-cost scissors: when the price-cost ratios were more adverse in arable than in pastoral
Grain & Wool Prices with Depopulation
ENGLISH POPULATION ESTIMATES

1088 - 1523: in Millions

<table>
<thead>
<tr>
<th>Years</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1149</td>
<td>2,000,000</td>
</tr>
<tr>
<td>1262</td>
<td>6,000,000</td>
</tr>
<tr>
<td>1317</td>
<td>8,000,000</td>
</tr>
<tr>
<td>1450</td>
<td>2,000,000</td>
</tr>
</tbody>
</table>
Why did Tudor Enclosures take place so late: if demography is crucial?

• (1) **If the economics of depopulation are the prime consideration**, why did Enclosures begin only a **full century after the Black Death**?

• (2) **Possibly because the depopulation** and total vacancy of tenancy lands did not become severe until the mid-15\(^{th}\) century?

• (3) **Possibly because the relative shift in arable and livestock prices** did not become decisive until the 1460s → next topic (English cloth trade)
Why did Tudor Enclosures take place so late: if demography is crucial? (2)

- (4) Why was the Tudor enclosure movement devoted almost entirely to sheep raising?
- and not to other forms of livestock farming?
- calamitous fall of the wool export trade after the establishment of the Calais Staple (1363), especially from the 1390s → with very adverse consequences for both wool prices and sheep production
- (5) Expansion of English cloth export trade - remains chief agent of change from 1460s
Rise of the English Cloth Export Trade: role of taxation

• (1) **Export taxes on Wool**: wool export taxes became increasingly heavier (as seen), especially from 1360s,
• (2) **Export taxes on woollen cloths**: remained light:
  - on denizens: only 14d per cloth (from 1347)
  - on Hansard Germans: even less: 12d per cloth (by the Carta Mercatoria of 1303)
• (3) **Result**: cloth export taxes were only about 3% of export values, vs. up to 50% on wools-
  accounting for 60-70% of Flemish production costs
• (4) **obvious English economic advantage**: convert tax-
  free wools at home into woollen cloths for export
Trends in English Cloth Export Trade, 1350s to 1460s: 1

• (1) Initial expansion of English cloth exports: peaking in the 1390s

• - as noted, that expansion failed to compensate for the stark decline of wool exports

(2) Problems: falling populations, depressions, piracy, warfare in European markets:

- conflicts with the German Hanseatic League in the Baltic region (to be seen in later lecture, on Trade)

→ disrupted or curbed cloth sales

• (3) Result: Cloth exports fell: from 1390s to 1420s:

• (4) Brief recovery in 1420s, then a severe slump: with a general North-European depression, from the 1440s to 1460s (to be explored later: in the Trade lectures)
Trends in English Cloth Export Trade, 1350s to 1460s: 2

• (5) English cloth trade did NOT vanquish its rivals in the Low Countries until the 1460s
• but then chiefly because of even more adverse English fiscal policies imposed on the wool export trade (also to be seen later)
• (6) From 1460s: unparalleled boom in the English cloth trade
  - see the graphs below
English Cloth Trade Boom: 1460s to the 1540s

• (1) **English cloth-trade boom lasting 80 years:** from 1460s to the 1540s
• (2) **Coincides with the first Tudor Enclosures,** at least to the 1520s
• (3) **Reflected in changing grain:wool price ratios:**
  • more favourable to wool from 1460s to the 1520s
  • but from the 1520s, grain prices rose faster than wool prices, for the next century: discussed next term
• (4) **Note:** attributing enclosures to cloth exports was a once fashionable thesis: in early 20\textsuperscript{th} century
  • – but it is no longer is: except for me! Who to believe?
English Wool & Cloth Exports 1280-1545
Woolsacks and Broadcloths 5 year means

Quinquennial Means

Woolsack Exports
Broadcloth Exports
Total Exports (1 sack = 4.333 cloths)
ENGLISH CLOTH EXPORTS

1345-49 to 1540-44: Five Yr Means

Quinquennial Means (1345/9 - 1540/4)

- Denizen
- Other Alien Exports
- Hansard
- Total Exports
GRAIN AND WOOL PRICE MOVEMENTS IN ENGLAND: Decennial Means, 1450-9 to 1640-9

BASE: Mean of 1450-9 = 100

Grain Prices

Wool Prices
The role of the Antwerp market

• (1) **English cloth trade boom of 1460 – 1540 coincides with the Golden Age of Antwerp:**
• or to 1560s, when it had become the commercial-financial capital and chief European market
• (2) **English cloth trade provided the first leg of the commercial tripod** on which Antwerp’s supremacy rested: discussed in later Trade lecture
• a tripod of **English woollens, South German metals (silver + copper), and Portuguese spices**
Monetary Factors in English Cloth Export Boom to Antwerp Market

1. **South German silver-copper mining boom from the 1460s:**
   - South German merchant bankers brought their silver, copper, and fustian textiles to Antwerp – along with banking enterprises.
   - **Chiefly to exchange these good for English woollens:** which were dyed & finished in and around Antwerp and in neighbouring Dutch towns.

2. **English monetary policy:** in 1464, Edward IV debased the English silver coinage by 20% -- currency depreciation stimulated exports.
   - since the woollens were sold in depreciated pounds sterling.

3. **Burgundian monetary policy:** in 1466, in retaliation, Philip the Good, duke of Burgundy (ruler of Low Countries)-
   - debased both silver and gold: though by a lesser degree.
   - In doing so, he altered the bimetallic mint-ratios to favour silver strongly: to offer a higher price for silver in relation to gold and other goods.
Economic & Social Importance of the early Tudor Enclosures (to 1520)

• (1) **Removal of feudal barriers:** of manorial Open or Common Field farming
• (2) **Conversion of communal property rights into exclusive private property rights**
  - right of owner to work the land without hindrances
  - or to lease the land to anyone of his choosing
  - right to sell, trade, bequeath, as well as lease land
  - right to mortgage land: to raise capital by pledging land as collateral in a loan: **not possible with communal rights in Open Field farming**
• (3) **Right and ability of landlord to capture the Ricardian rent:** or to share it with a few tenants, with periodic changes in the lease (fixed term)
Enclosures & Capital Investments

• (1) **Agricultural development required often large capital investments:**
  • For late-medieval English agriculture: principally in livestock
  • especially with the ‘New Husbandry’ (next term)
  
• (2) **Role of Enclosures in facilitating greater capital investments:**
  • a) **mortgaging land:** with land as collateral
  • b) **capturing Ricardian economic rents** on land
  • c) **capital gains** from selling land, other private assets:
Did Tudor Enclosures promote increased productivity?

- (1) **Gains from single management: by owner or tenant**
  - a) **to make all economic decisions:** without need for communal consent (concerned about risk-aversion).
  - b) **freedom to allocate resources:** between arable and pasture; crop selections; reducing the fallow, etc.
  - c) **allocation of inputs:** land, labour, capital – market oriented
  - d) **hiring wage-labour to displace former tenants:** avoid problems of disguised unemployment
  - e) **better ability to achieve economies of scale:** through amalgamations (or divisions of large estates)
Did Tudor Enclosures promote increased productivity? - 2

- (2) Enclosures, however, offered only reasonable possibilities:
  - did not guarantee that rational choice and profit maximization be pursued
  - this question must be left to the second term, when we return to the later Tudor and the Stuart Enclosures, the ‘New Husbandry’, the ‘Rise of the Gentry’ debate
Ralph Davis: on agricultural innovations

- No class of users of the land was less able to innovate [than the peasantry]; and great numbers of them were subsistence farmers who grew [grain], not for the market except in years of unusually good harvest, but for their own families. Though peasants were by no means unwilling to innovate if the practical advantages were clear and the risks small, they had the least facilities for information, the least resources to bear the costs and risks of change, the least capacity to coerce their slow-moving fellows into the cooperative effort that was usually necessary for large-scale changes.

- It was not easy for landlords to compel the peasant community of a village to try new ways so long as most tenures gave the peasants security at more or less fixed rentals, and the key to extensive rural change had to be found eventually in the breaking down of old tenures so that peasants could be subjected to economic pressures, or alternatively forced out in favour of market-oriented farmers.