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Session 5 (Salon E): 4 April 2013
Economic and Cultural Interactions in Northern Europe
John Munro, University of Toronto
How Golden was the Burgundian ‘Golden Age’ in the 15th century?

How financing warfare reduced the living standards of urban craftsmen in the southern Low Countries
The Burgundian Golden Age 1

- In the Burgundian Low Countries, the 15th century is commonly viewed as the late-medieval ‘Golden Age’
- Such a term can apply, however, only to the second half of Duke Philip the Good’s reign (1419-67)
  - from peace treaty of Arras with France, in Sept. 1435, to Philip’s death in 1467
- Rest of century suffered from destructive warfare
  - a) previous period: especially 1416-35
  - b) the succeeding and more war-torn reigns of Duke Charles (1467-77), Duchess Marie (1477-82) and Habsburg Archduke Maximilian (especially civil wars of 1482-1493)
The Burgundian Golden Age 2

• At least the second half of Duke Philip’s reign (1435-67) should qualify for the term ‘Golden Age’: for two reasons:

• (1) **social and cultural**: the flourishing of literature and the arts --- music, painting, architecture – especially at the greatly expanded Burgundian court in Brussels

• (2) **economic**:
  • - **rising real wages**: for many urban craftsmen
  • - **other signs of urban prosperity** in the most highly urbanized society of northern Europe
Major Thesis of this Paper:

1. Despite widespread European evidence for rising real wages and incomes in the 15th century, even Philip the Good’s reign was no ‘Golden Age’ for the Burgundian Low Countries.

2. Rising real wages were the product NOT of economic growth or prosperity, but rather of Deflation combined with Nominal Wage Stickiness: both of which reflect depression rather than growth & prosperity.
The Burgundian Golden Age 4

- (3) In Low Countries, in contrast to England, the rise in real wages was often counteracted by war-related monetary & fiscal policies
  - a) by coinage debasements, to produce seigniorage revenues ➔ severe inflations
  - b) excise taxes on consumption (hitting the poor most adversely) in order to provide payments on rising public debts almost entirely for financing warfare/defence
The Burgundian Golden Age 4

• (4) Other negative war-related factors:
  • - a) continuing population decline, especially rural
  • - b) poverty: evidence for increasing incidence of poverty (tax relief for the poor)
  • - c) severe, irredeemable decline of region’s industrial mainstay: woollen textiles
  • - but the last is not topic of this paper
What do ‘Real Wages’ Mean? (1)

1) The ‘real wage’ is simply the purchasing power – in goods and services – of the nominal money wage paid to the craftsmen, usually in current silver coin: wage defined in money-of-account

2) Usually measured in terms of the daily wage (paid by the day, not the hour): and so we cannot measure annual money incomes without knowing number of days of paid employment

   here: an estimate of 210 days employment

3) Real Wages are NOT real incomes – but best proxy
What do Real Wages Mean? (2)

• 4) **Two ways of measuring Real Wages:**
  
  a) **by Index numbers:** here the ‘base’ for the indexes: the mean of 1451-75 = 100:
  
  - **The formula is:** \( \frac{NWI}{CPI} = RWI \)
  
  - Nominal Money Wage Index divided by the Consumer Price Index = Real Wage Index

  b) **by the number of commodity baskets that a master mason could purchase** with his annual money wage income (for 210 days).
<table>
<thead>
<tr>
<th>COMMODITY</th>
<th>ENGLAND</th>
<th>BRABANT</th>
<th>FLANDERS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount</td>
<td>Unit</td>
<td>Value</td>
</tr>
<tr>
<td></td>
<td>in d.</td>
<td>gr.</td>
<td>sterl</td>
</tr>
<tr>
<td><strong>Farinaceous</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td>1.25</td>
<td>bushels</td>
<td>9.967</td>
</tr>
<tr>
<td>Rye</td>
<td>1.00</td>
<td>bushels</td>
<td>6.279</td>
</tr>
<tr>
<td>Barley</td>
<td>0.50</td>
<td>bushels</td>
<td>2.006</td>
</tr>
<tr>
<td>Peas</td>
<td>0.67</td>
<td>bushels</td>
<td>2.947</td>
</tr>
<tr>
<td>Barley Malt: drink</td>
<td>4.50</td>
<td>bushels</td>
<td>24.227</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>7.92</td>
<td>bushels</td>
<td>46.026</td>
</tr>
<tr>
<td><strong>Meat, Fish, Dairy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pigs</td>
<td>0.50</td>
<td>no.</td>
<td>15.418</td>
</tr>
<tr>
<td>Sheep</td>
<td>0.50</td>
<td>no.</td>
<td>8.532</td>
</tr>
<tr>
<td>Beef</td>
<td></td>
<td></td>
<td>23.500</td>
</tr>
<tr>
<td>Herrings</td>
<td>40.00</td>
<td>no.</td>
<td>6.595</td>
</tr>
<tr>
<td>Butter</td>
<td>10.00</td>
<td>lb.</td>
<td>10.238</td>
</tr>
<tr>
<td>Cheese</td>
<td>10.00</td>
<td>lb.</td>
<td>5.341</td>
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<tr>
<td><strong>Sub-total</strong></td>
<td>46.144</td>
<td></td>
<td>60.259</td>
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<tr>
<td><strong>Industrial</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Charcoal</td>
<td>4.25</td>
<td>bushels</td>
<td>3.813</td>
</tr>
<tr>
<td>Candles</td>
<td>2.75</td>
<td>lb.</td>
<td>3.475</td>
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<tr>
<td>Lamp Oil</td>
<td>0.50</td>
<td>pint</td>
<td>0.865</td>
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<tr>
<td>Canvas/Linen</td>
<td>0.67</td>
<td>yard</td>
<td>2.757</td>
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<tr>
<td>Shirting</td>
<td>0.50</td>
<td>yard</td>
<td>2.718</td>
</tr>
<tr>
<td>Coarse Woollens</td>
<td>0.33</td>
<td>yard</td>
<td>7.023</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>20.651</td>
<td></td>
<td>40.013</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>112.801</td>
<td></td>
<td>155.016</td>
</tr>
</tbody>
</table>

M1451-75 = 100
What do Real Wages Mean? (3)

5) The Economists’ Definition of Real Wages:
   a) \( RW = MRP_L \): the real wage is determined by the marginal revenue product of labour
   b) the market value of the last (marginal) unit of product produced by the last unit of labour
   c) many economists too simplistically believe that increases in labour productivity provide the sole explanation for rising real wages
The problem of Wage Stickiness

1) A predominant feature of late-medieval wages is (downward) nominal \textit{WAGE-STICKINESS}: from 1370s

2) More precisely, this phenomena is normally found only during times of deflation – with falling or generally stable prices: that is, nominal wages usually remained rigid and did not fall along with other prices → RW rise

3) During times of inflation, nominal money wages may rise, but usually less so than prices → RW fall

4) Therefore: real wages were largely determined by movements of the price level:
Money & Prices

- **Behaviour of prices**: fundamental to study of real wages (and incomes) in late-medieval society

  (1) **changes in relative prices (short & long term)**: largely a function of real factors: such as demography, commercial institutions, technology, etc.

  (2) **changes in nominal prices with both short- and long-term behaviour of the price level (CPI)**: largely, but not entirely, a function of monetary factors, combining changes in the **STOCKS & FLOWS OF MONEY**, relative to real factors: \[ M.V = P.y \ (M = kPy) \]

  A) monetary expansion \( \rightarrow \) inflation (usually)
  
  B) monetary contraction \( \rightarrow \) deflation (usually)
Coinage Debasements (1)

1) **Coinage Debasements**: the only monetary factor to be discussed here: with even short-run importance in the price level.

2) **Definition of debasement**: a reduction in the quantity of fine precious metal represented in the unit of the money-of-account: e.g., the quantity of pure silver in the penny (d), shilling (s), pound (£):

- £1 = 20s. = 240d.
Coinage Debasements (2)

• 3) **How debasements were achieved**
  
  a) **by reducing the fineness**: more copper → less silver (or gold) in the coin; **and/or** by
  
  b) **by reducing the weight** of the coin itself
  
  c) **by increasing the money-of-account value** of the coin: virtually always **only** for gold and high-value silver coins (never for the penny)

• - the results for the first two was to INCREASE the number of coins struck from a lb or *marc* of fine metal

• and for all three, the result was to REDUCE the quantity of such metal in the money-of-account unit
Coinage Debasements (3)

- 4) **Motives for debasements: two-fold**
  - a) **aggressive fiscal policy**: to increase prince’s **seigniorage revenues** (tax on minting) by luring/forcing more bullion to his mints – one of few elastic revenue sources at his command
  - b) **defensive monetary policies**:
    - i) **to protect a realm’s money supplies and mints** from its neighbour’s predatory mint policies
    - ii) **to remedy deficiencies in current circulating coinages**, with deterioration from counterfeits, clipping, normal wear & tear etc. [complicated]
5) **Coinage Debasements: Effects on Prices**

a) *almost always INFLATIONARY:* because debasements increased both the effective *money supply* (number of circulating coins) and often also the *income velocity* of money

b) *But inflationary effects were generally less powerful than would normally be expected:*  
   i) *offset in part by prevailing deflationary conditions* 
   ii) *offset by stimulus that inflation $\Rightarrow \Delta$ production* 
   iii) *money supply not increased proportionally:* not all current coins were reminted; and many coins would be exported (especially coins of the other metal)
Coinage Debasements: Effects on Prices

c) N.B.: relationship between debasement and inflation is NOT directly proportional, but inversely related, as reciprocals:

\[(1/1 - x) - 1\], where \(x\) = the percentage reduction in the silver content of the money of account.

Thus, with a 20% reduction in the silver content of the coin: \((1/1 - 0.20) - 1 = 0.25\),

\(\Rightarrow\) a 25% increase in the money-of-account value of a marc or pound of fine silver (but NOT necessarily of prices in general).
The Statistical Evidence on Real Wages

- The following slides are presentations of the evidence for real wages of urban building craftsmen, in the 15th century, for the following:
  - In SW England: at Oxford & Cambridge colleges
  - In Flanders: for the towns of Bruges and Aalst
  - In Brabant: for the Antwerp-Lier region
- For more effective comparisons, real wages for previous & later periods are shown – when and where they are available.
The Special Case of England

• The 19th-century English economist, James E. Thorold Rogers (1823-90), stated that:

• the fifteenth century was the Golden Age of the English artisan: in terms of the purchasing power of his money wages.

• Or the post-Plague era: from 1370s: Rogers and most historians believe that depopulation was the major cause of rising real wages in the later Middle Ages: by increasing labour productivity

• the following graphs demonstrate why the 15th century is seen as a ‘Golden Age’ for artisans:
Phelps Brown & Hopkins Indices

Prices & Builders' Wages: 1451-75=100

Years in Quinquennial Means, 1266-1954

- Composite Price Index
- Nominal Wage Index
- Real Wage Index
English Masons Wages: Oxford-Cambridge
CPI, NWI, and RW Indexes, 1336-1500

Nominal and Real Wage Indexes

Commodity Price Index 1451-1475=100

Quinquennial Means, 1336 to 1500

- England: Commodity Price Index
- English Masons Nominal Wage Index
- English Masons' Real Wage Index
English Price and Wage Indices

Urban Masons: 1401-05 to 1516-20

- Composite Price Index 1451-75=100
- Nominal Wage Index 1451-75=100
- Real Wage Index 1451-75=100

Years in Quinquennial Means

Composite Price Index, 1451-75=100
Nominal & Real Wage Index, 1451-75=100
Differences between late-medieval England and the Low Countries

1) **Warfare:** England’s terrain: far less involved in Hundred Years’ War than was that of Low Countries, also beset by civil wars, while England’s Wars of Roses (1455-87) had minimal impact.

2) **Coinage debasements: as fiscal policies**
   a) rare in England: only in 1411 (purely defensive) and 1464-65 (more aggressive, under Edward IV): crown had ample revenues from wool-export taxes
   b) very common in Low Countries, and always aggressive (war-related): in 1416, 1418, 1428-32, 1466-67, 1477, 1482-93

3) **Urban excise taxes:** absent in England (to 1652)
Debasements and Inflation in Medieval and Early Modern Europe

Relationships between the debasements of the Flemish silver penny groot and changes in the Consumer Price Index in Flanders, 1409 - 1484

Consumer Price Index: base 1451-75 = 100

<table>
<thead>
<tr>
<th>Years</th>
<th>Silver Content of the Flemish silver penny groot in grams</th>
<th>percentage change from previous coinage</th>
<th>Value of 1 kg fine silver in Flemish</th>
<th>percentage change from previous coinage</th>
<th>Year 1</th>
<th>Year 3</th>
<th>Price Index in Year 1</th>
<th>Price Index in Year 3</th>
<th>Percentage Change 2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1409</td>
<td>1.182</td>
<td></td>
<td>3.524</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1416</td>
<td>0.958</td>
<td>-18.95%</td>
<td>4.349</td>
<td>23.39%</td>
<td>1416</td>
<td>1418</td>
<td>118.916</td>
<td>92.239</td>
<td>-22.43%</td>
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<tr>
<td>1418</td>
<td>0.850</td>
<td>-11.30%</td>
<td>4.903</td>
<td>12.75%</td>
<td>1418</td>
<td>1420</td>
<td>92.239</td>
<td>98.118</td>
<td>6.37%</td>
</tr>
<tr>
<td>1428</td>
<td>0.749</td>
<td>-11.91%</td>
<td>5.566</td>
<td>13.53%</td>
<td>1428</td>
<td>1430</td>
<td>112.317</td>
<td>125.849</td>
<td>12.05%</td>
</tr>
<tr>
<td>1433</td>
<td>0.814</td>
<td>8.80%</td>
<td>5.116</td>
<td>-8.09%</td>
<td>1433</td>
<td>1435</td>
<td>139.210</td>
<td>108.046</td>
<td>-22.39%</td>
</tr>
<tr>
<td>1466</td>
<td>0.703</td>
<td>-13.67%</td>
<td>5.926</td>
<td>15.83%</td>
<td>1466</td>
<td>1468</td>
<td>95.930</td>
<td>96.153</td>
<td>0.23%</td>
</tr>
<tr>
<td>1467</td>
<td>0.677</td>
<td>-3.77%</td>
<td>6.158</td>
<td>3.92%</td>
<td>1467</td>
<td>1469</td>
<td>102.146</td>
<td>96.000</td>
<td>-6.02%</td>
</tr>
<tr>
<td>1474</td>
<td>0.597</td>
<td>-11.79%</td>
<td>6.981</td>
<td>13.37%</td>
<td>1474</td>
<td>1476</td>
<td>108.208</td>
<td>92.370</td>
<td>-14.64%</td>
</tr>
<tr>
<td>1477</td>
<td>0.522</td>
<td>-12.50%</td>
<td>7.979</td>
<td>14.29%</td>
<td>1477</td>
<td>1479</td>
<td>98.775</td>
<td>149.327</td>
<td>51.18%</td>
</tr>
<tr>
<td>1482</td>
<td>0.466</td>
<td>-10.71%</td>
<td>8.936</td>
<td>12.00%</td>
<td>1482</td>
<td>1484</td>
<td>193.932</td>
<td>120.307</td>
<td>-37.96%</td>
</tr>
</tbody>
</table>
Mint Outputs of England & Flanders/LC

1346 - 1500 in constant £ sterling:
Flemish-Burgundian Mint Outputs in Current Pounds Groot Flemish and the Flemish Consumer Price Index: Mean 1451-75 =100 in quinquennial means, 1351-55 to 1516-20
Flemish Commodity Prices, 1346 - 1500
in 5 yr means: 1451-75=100
FLANDERS: Wage Incomes in Baskets
Craftsmen, Journeymen, Policemen

Annual Wage Income: Commodity Baskets

Quinquennial Harmonic Means, 1346-1485

- Bruges-Ghent Master Masons
- Bruges Masons Journeymen
- Bruges Policemen
- Ghent Journeymen Fullers
- Kortrijk Journeymen Fullers
- Flemish Small Towns: Craftsmen
Annual Incomes of Master Masons in Bruges and Aalst in Flemish Commodity Baskets in Quinquennial Means, 1396-1400 to 1481-85
BRABANT: Craftsmen's Wages, 1396-1505
Annual Wages: in Commodity Baskets

Quinquennial Harmonic Means, 1396-1505

- Antwerp Master Mason
- Antwerp Masons Labourers
- Mechelen Master Masons
- Mechelen Master Carpenters
- Mechelen Master Pavers
- Mechelen Master Masons OLV
- Mechelen OLV Masons Labourer
- Mechelen Master Carpenters OLV
- Mechelen Common Labourers
Master Masons's Wages: Basket of Goods
England & Low Countries: 1336 to 1500

Annual Wage Income: Commodity Baskets

_quinquennial harmonic means, 1336-1500_

- Oxford-Cambridge Masons
- Bruges-Ghent Masons
- Flemish Small Towns: Masons
- Antwerp Masons
- Mechelen Masons
Urban Excise Taxes & Warfare 1

1) The evidence on REAL WAGES for the southern Low Countries in 15th century:
   a) during periods of coinage debasements, real wages fell, and fell sharply
   b) during periods of monetary stability, with monetary contraction and prevailing deflation, real wages rose, often sharply

2) But urban taxation often offset the real income effects of rising real wages - during the mid-century period of rising real wages
Urban Excise Taxes & Warfare 2

3) **Urban taxes were also, to a large extent, war-related:** to make required payments on public debts and the Flemish towns’ obligation to render subventions to the Duke: **to finance Burgundian warfare and defence**

4) **Thus warfare was financed (everywhere) not through taxation but through borrowing**

5) **Public civic borrowing was in the form of sales of annuities:** known as *rentes* or *renten* (not in form of interest-bearing loans)
• 6) **Usury ban**: explains why public borrowing was **NOT generally in the form of interest bearing loans**

• a) **From revival of anti-usury campaign in northern France, in 1220s**, towns and principalities switched from loans to ‘rentes’ or annuities

• b) **rentes, based on an older agrarian contract**, by which lenders & investors

• - provided town & territorial gov’ts with a lump sum of money, never to be repaid

• - in return for a life-time or perpetual stream of income
7) Papacy and Church Theologians on Rentes

a) 1250: Innocent IV decreed that rentes were not usurious PROVIDED that the buyer (lender-investor) could never require redemption of rentes, while sellers (debtor-issuers) were free to redeem them at will (but only at par)

b) Rentiers: could instead reclaim some capital by selling rentes to 3rd parties ➔ growth of financial markets

c) 15th century Papal bulls (1425, 1452, 1455): upheld Innocent IV’s decree, while also stipulating that annual payments (de facto interest) for and redemptions of rentes had to come from the ‘fruits of the land’ [usufruct], as in any normal rent contract.

d) This form of public borrowing now almost universal
• 7) Papacy and Church Theologians on Rentes (cont’d)

• e) excise taxes on the consumption of products of the land & sea met this provision: on wine, beer, bread, meat, fish, textiles (wool, linen), etc.

• f) highly regressive form of taxation, hitting lower income strata far more than rich – and only urban inhabitants (not applicable in rural areas)

• g) different from property taxes: which excluded poor

• h) gov’ts: sold tax farms for right to levy these excise taxes (so that evidence is indirect)

• 8) Evidence from town of Aalst (eastern Flanders):
Aalst Total Tax Farms and Revenues
livres parisis, 1396-1550: 5 yr means

- Total Beer Excise Taxes
- Total of Wine and Beer Excise
- Total Excise Tax Farms
- Total Civic Revenues

£ 12 parisis = £ 1 groot Flemish
Aalst: Renten & Excise Tax Revenues
in £ parisis: 1396-1550 in 5 yr means

£ parisis: excise taxes & renten sales

£ parisis: total civic revenues

£ parisis: total sales of renten

in quinquennial means

Excise Tax Farm Revenues
Total Sales of Renten
Total Civic Revenues
Aalst: Revenues & Expenditures in £ parisis: 1396-1550 in 5 yr means

£12 parisis = £1 groot Flemish

in livres parisis

in quinquennial means

Total Civic Revenues

Total Civic Expenditures
Aalst Excise Taxes in Consumer Baskets
1396-1550 in quinquennial means

![Graph showing the trends of Excise Tax Farms, Value of basket in d groot, Price Index, and Value of Excise Taxes in Baskets over the period 1396-1550.](chart.png)
Excise Tax Farms on Beer and Wine and Real Wages in Bruges and Aalst, 1396-1400 to 1481-85
in quinquennial means
Real Wages in terms of the value of the Flemish Commodity Basket
Values in Excise Tax Farms (Beer & Wine) in terms of Flemish Commodity Baskets a
Urban Taxes and Population (1)

1) the Population Problem and Taxation

a) Flemish population continued to decline over course of 15th century – especially after the 1439 plagues

b) Problem: a smaller and smaller number of survivors were forced to bear the entire tax burden of financing previously incurred public debts: rising per capita taxes

c) Population: evidence varied (none for Aalst, ca. 4,000):

- Hulst: 3,600 in 1417 ➔ 3,000 in 1469: -17%
- Dendermonde: 9,000 in 1360 ➔ 4,500 in 1460: -50%
- Ypres: 10,523 in 1431 ➔ 7,626 in 1491: -27.5%
Urban Taxes and Population (2)

• 2) **Population and Poverty in duchy of Brabant**
  
  a) **towns and villages of Brabant**: lying to the east of Flemish town of Aalst
  
  b) **1437 to 1496**: no. of hearth fell by 19%: population fell even more, as household size contracted
  
  b) **Note the relationship between falling population and increasing poverty**: i.e., proportion of ‘poor hearths’ that gained relief from **property** taxes (1437 → 1480 only)
  
  c) **For excise taxes**: never any such tax relief
  
  d) **hardly indications of a Golden Age**
<table>
<thead>
<tr>
<th>Area of Census</th>
<th>1437: no. of hearths in census</th>
<th>1437: percent poor hearths</th>
<th>1480: no. of hearths in census</th>
<th>1480: percent poor hearths</th>
<th>1496: no. of hearths in census</th>
<th>1496: no. of poor hearths</th>
<th>Percent Change from 1437 to 1496</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brussels</td>
<td>6,376</td>
<td>10.5</td>
<td>7,414</td>
<td>7.9</td>
<td>5,750</td>
<td>17.1</td>
<td>-9.82%</td>
</tr>
<tr>
<td>Antwerp</td>
<td>3,440</td>
<td>13.5</td>
<td>5,450</td>
<td>10.5</td>
<td>6,586</td>
<td>12.5</td>
<td>91.45%</td>
</tr>
<tr>
<td>Leuven</td>
<td>3,579</td>
<td>7.6</td>
<td>3,933</td>
<td>18.3</td>
<td>3,069</td>
<td>n.a.</td>
<td>-14.25%</td>
</tr>
<tr>
<td>s’Hertogenbosch</td>
<td>2,883</td>
<td>10.4</td>
<td>2,930</td>
<td>7.9</td>
<td>3,456</td>
<td>n.a.</td>
<td>19.88%</td>
</tr>
<tr>
<td>Sub-total Large Towns</td>
<td>16,278</td>
<td>10.5</td>
<td>19,727</td>
<td>14.8</td>
<td>18,861</td>
<td>n.a.</td>
<td>15.87%</td>
</tr>
<tr>
<td>Small Towns</td>
<td>14,159</td>
<td>9.2</td>
<td>12,216</td>
<td>28.1</td>
<td>10,600</td>
<td>n.a.</td>
<td>-25.14%</td>
</tr>
<tr>
<td>Villages</td>
<td>62,301</td>
<td>29.7</td>
<td>54,540</td>
<td>31.6</td>
<td>45,882</td>
<td>n.a.</td>
<td>-26.35%</td>
</tr>
<tr>
<td>Total Duchy</td>
<td>92,738</td>
<td>23.4</td>
<td>86,483</td>
<td>27.3</td>
<td>75,343</td>
<td>n.a.</td>
<td>-18.76%</td>
</tr>
<tr>
<td>Percentage Change from 1437</td>
<td>-6.74%</td>
<td></td>
<td>-18.76%</td>
<td></td>
<td></td>
<td></td>
<td>18.76%</td>
</tr>
</tbody>
</table>
Industrial Decline: Textiles

1) **Textiles, esp. high-grade woollens**: industrial & commercial mainstay of Low Countries’ economies

2) **England’s War-Related Fiscal Impositions on Wool-Export Trade: Calais Staple Bullion and Partition Ordinances, 1429 – 1473**: to extort bullion & deny credit in Staple wool sales to Low Countries: added to existing burden of high English wool-export taxes (war-finance)

3) **Major consequences**: expansion of English cloth trade, ultimately vanquishing most of Low Countries’ draperies

4) **Devastating injury of Calais Ordinances inflicted on LC luxury cloth industries** dependent on English wools

5) **Only partially offset by rise of those Flemish nouvelles draperies**, which switched to Spanish wools
English Wool and Broadcloth Exports
1281-5 to 1541-45 in 5 year means

- Total Woolsack Exports
- Total Broadcloth Exports
- Total Wool & Cloth as Broadcloths
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.
Conclusions for the southern Low Countries:

- No Golden Age for their urban craftsmen, if we combine the accumulated evidence on:
  - (1) **sharp declines in real wages** during times of coinage debasements
  - (2) **sharp increases in levels of urban excise taxes**, which rose even during peace-time, with rising real wages
  - (3) **population decline and increasing poverty** (at least in Brabant, with number of ‘poor hearths’)
  - (4) **Steep declines in urban woollen cloth outputs**: in towns of both Flanders & Brabant