

VII: INTERNATIONAL COMMERCE:

**Changing Patterns of International Trade in Late
Medieval Europe, ca. 1280 – ca. 1520:**

**Part I: Italy, the German Hanse, and the Rise of the
Dutch**

Revised 19 November 2013

A. General Factors & Features

- (1) **Adam Smith, *Wealth of Nations* (1776)**: chapter 3:
- ‘That the division of labour is determined by the extent of the market’
- - **economic specialization and scale economies determined by aggregate market demand**
- - the keys to productivity gains and growth
- (2) **The demand side: Exports**: development of regional & foreign markets: ultimately the world
- (3) **The supply side: Imports**:
- - raw materials for industrialization & exports
- - foodstuffs to permit urbanization
- (4) **Supplying capital** for commerce, finance, industry

B. Depression, Warfare, and Transaction Costs in Foreign Trade

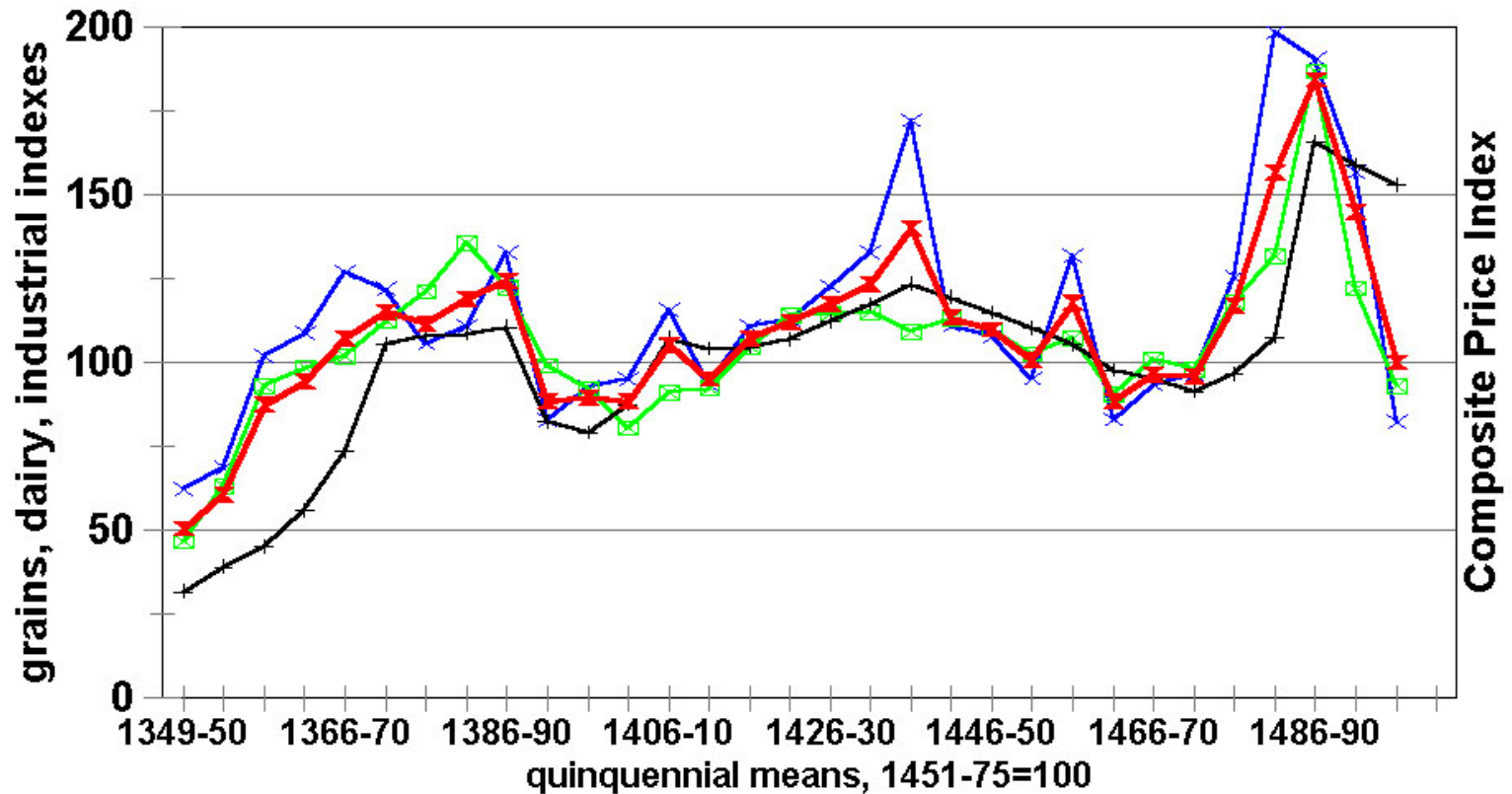
- (1) **The Late-Medieval 'Depression'**: the debate about depopulation and real incomes
- (2) **Changes in real incomes:**
 - - obviously played a strong role in market demand
 - - but so did population: aggregate demand
 - - **continuing strong belief that real wages or real incomes rose in later-medieval Europe**: chief argument of those opposing concepts of the late-medieval 'Great Depression'
- (3) **Mathematical formulae for Real Wage changes**
 - (a) $RW = MRP_L$:
 - (b) $RW = NWI/CPI$: nominal money wage index divided by the Consumer Price Index (base: mean 1451-75 = 100)

Depression, Warfare, and Late Medieval Depression: 2

- (4) Real wages in later-medieval Europe: $RW = NWI/CPI$
- - combination of institutional wage stickiness and fluctuations of the price level (CPI), so that monetary factors determined real wages
- - fell with inflation,
- - and thus rose with deflation

Flemish Commodity Prices, 1346 - 1500

in 5 yr means: 1451-75=100



—x— farinaceous index

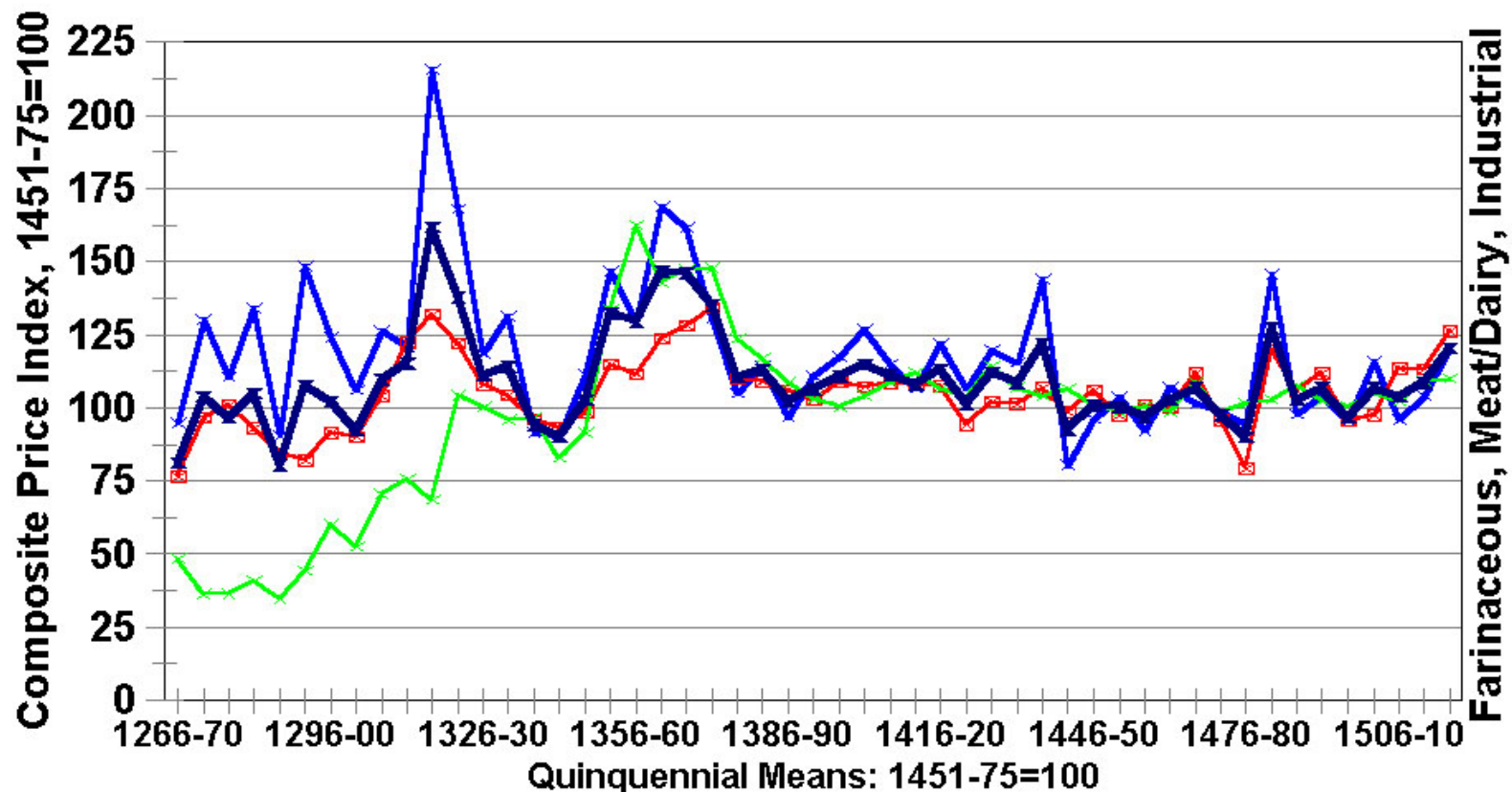
—□— dairy products index

—+— Industrial (textile) index

—x— Composite Price Index 1451-75=100

English Price Indices, 1266-1520

Farinaceous, Meat/Dairy, Industrial



—x— Farinaceous Index

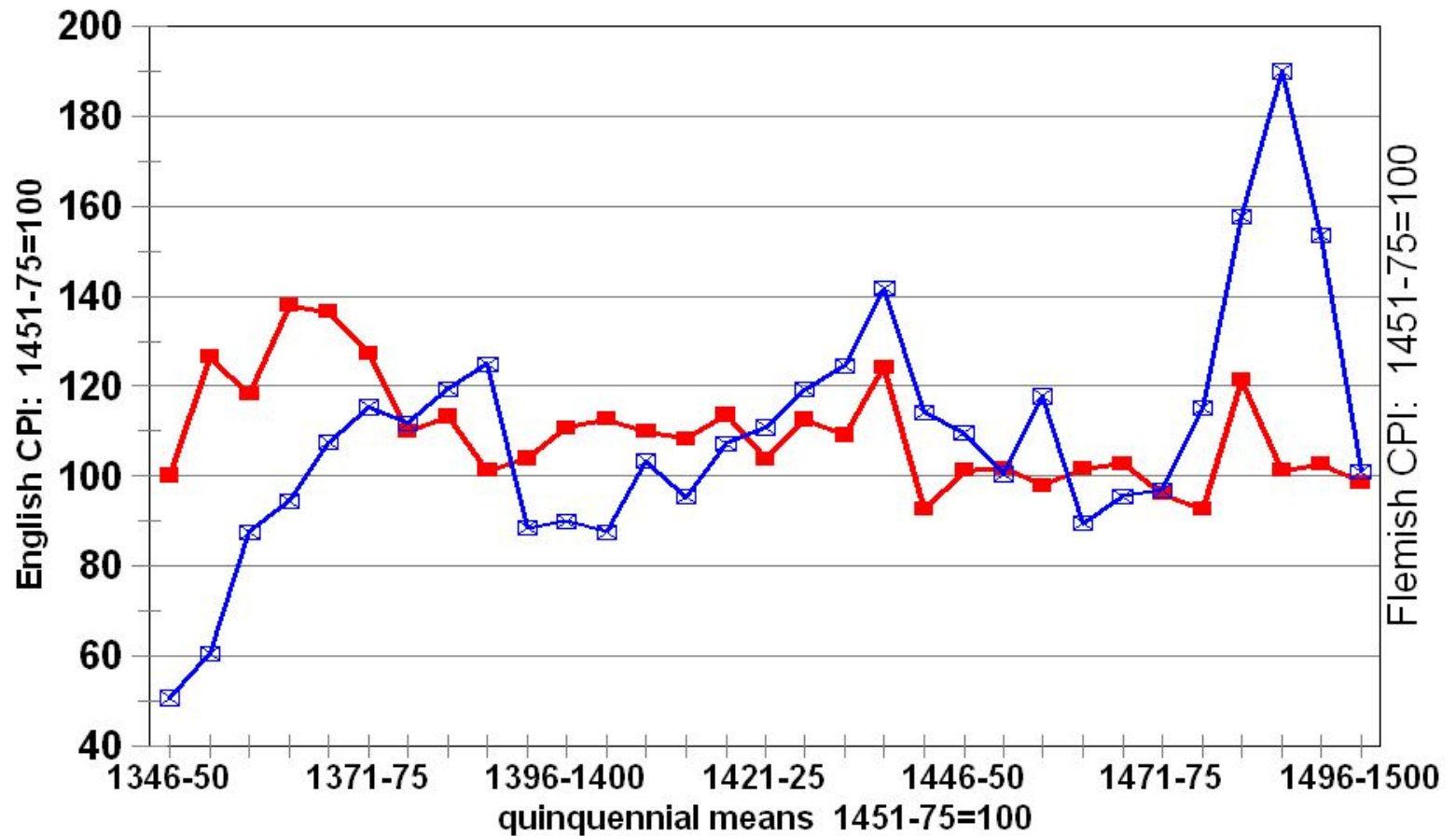
—□— Meat/Dairy Index

—x— Industrial Goods Index

—□— Composite Price Index 1451-75=100

England & Flanders: Price Indexes

CPI in quinquennial means, 1346-1500

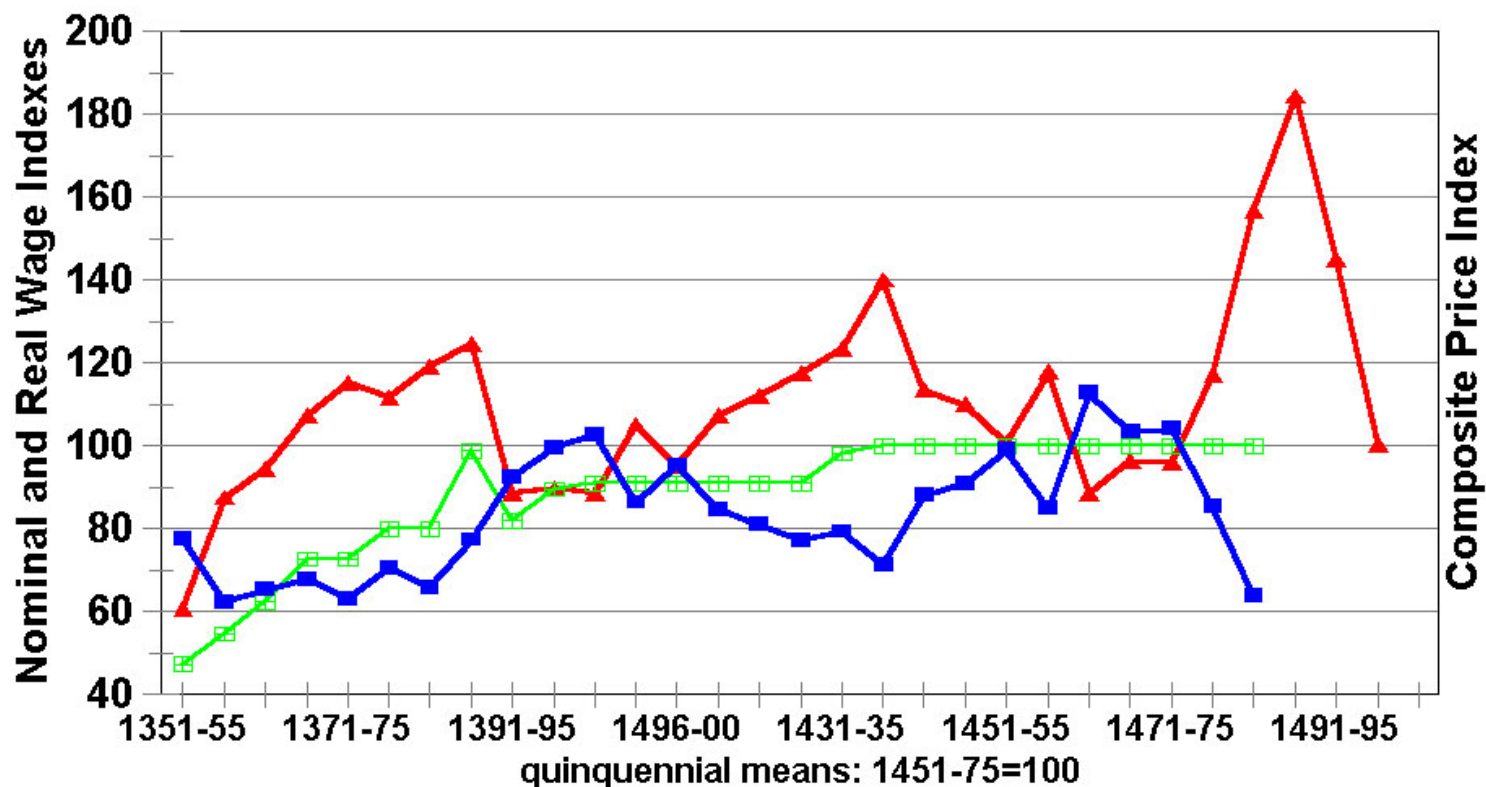


English CPI

Flemish CPI 1451-75=100

Flemish Builders' Wages, 1351 - 1500

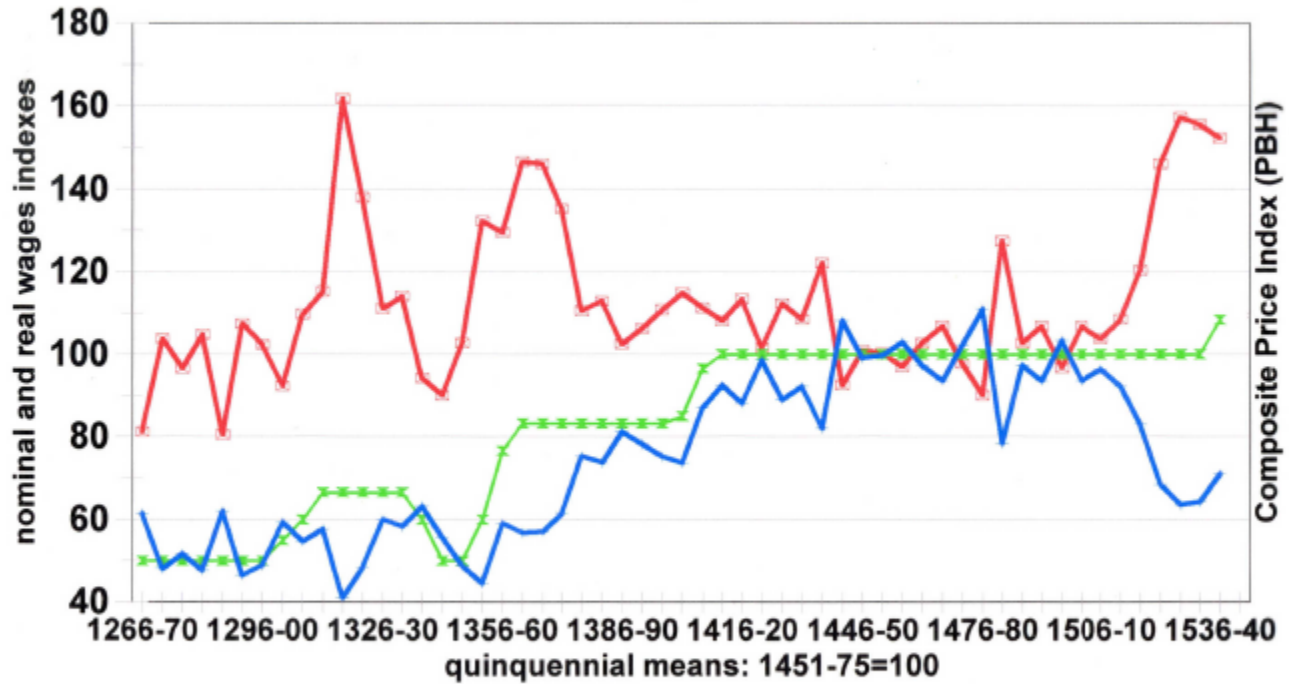
Nominal & Real Wage Indexes: 5 yr mean



- ▲— Composite Price Index: 1451-75=100
- Real Wage Index (Bruges)
- Nominal Wage Index (Bruges)

English Builders' Wages, 1266 - 1540

nominal & real wage indexes: 5 yr mean



— Composite Price Index (PBH)

— nominal wage index (1451-75=6d)

— real wage index (1451-75=100)

Warfare and Great Depression 1

- (5) **Impact of Warfare: late-medieval economy:**
- - **very negative, regressive effect on real incomes**
- - **coinage debasements to finance warfare:** chief cause of later medieval inflations
- - **soaring taxes, tolls, tariffs on trade**
- - **trade embargoes & other trade imposition**
- - **bullionist impediments on monetary flows**
- - **piracy, brigandage, mercenary wars:** disruptions of traditional trade routes

Warfare and Great Depression 2

- (6) **Douglass North: on late-medieval economy:**
- **“The decline of population, coupled with war, confiscation, pillage and revolution, reduced the volume of trade and stimulated a trend toward local self-sufficiency.**
- **The losses to society due to the decline in specialization and reduced division of labor certainly argues against a rise in the standard of living.”**

Warfare and Great Depression 3

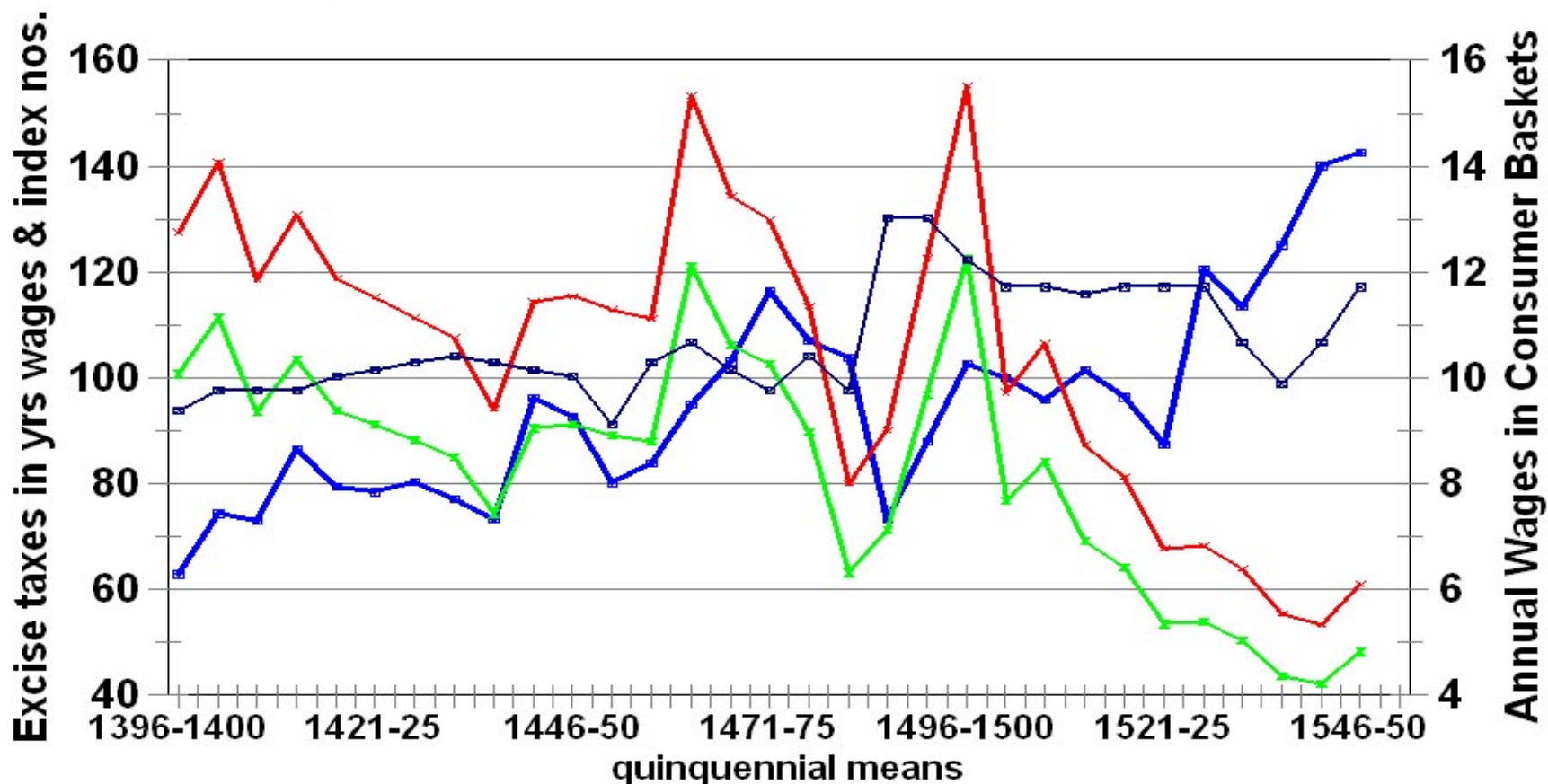
- (7) **Coinage Debasements: 14th & 15th century**
- (a) **Italy, France, Low Countries, Spain (Castile & Aragon), and Germany** all suffered from radical, most extensive debasements
- (b) **England: exception until Henry VIII (1540s): possible reasons**
 - - wars were not fought on English soil
 - - large revenues for wool export taxes lessened need for mint seigniorage fees

Warfare and Great Depression 4

- (8) **Warfare and Public Debts (except England):**
- - a) **late-medieval warfare ever more costly:**
- - larger armies; new artillery, hand guns,
- - far larger, more heavily fortified ships
- - b) **public borrowing chief means of financing war**
- - → **required vast increases in taxation** to pay charges on the public debt: annuity payments, interest, etc.
 - → **especially consumption taxes (excise taxes):** on alcohol (beer and wine: **highly regressive**)
- - c) **Problem of Depopulation:** increased the per capita burden of payments on prior public debt

Aalst Masons' Wages, 1396-1550

Wages in baskets, index nos., & taxes



Value of Taxes in Years' Wages

Masons' Annual Wage in Baskets

Real Wage Index 1451-75=100

Nominal Wage Index 1451-75=100

International Warfare from 1270s

- - **1275: Muslim Berber invasions of Spain**
- - **1282: Wars of Sicilian Vespers in Italy to 1314**
- - **1291: Mamluk Egypt: conquest of Crusader states**
- - **1291- 99: Venetian-Genoese wars over Black Sea**
- - **1294- 1328: Anglo-French-Flemish wars + Scotland**
- - **1303 – into 15th cent: Ottoman Turks: invasions of Byzantine Empire and then the Balkans**
- - **1314: Italy: Guelf-Ghibelline wars to 1380s**
- - **1337 – 1453: Hundred Years' War: England & France**





SERBIA

✕ 1330
Küstendil

BYZANTINE EMPIRE

Adrianople

Pera

Constantinople

Nicaea
Brussa

Smyrna

Sinope

Trapezus

Emp. of TRAPEZUS

Samsun

OTTOMAN TURKS

1243 MONGOLS

TURKS

1259-60

Caraman
Iconium

Kdm of LITTLE ARMENIA

Lajazzo

Pty of

ANTIOCH

MAMELUK EMPIRE

County of TRIPOLIS

Kdm of CYPRUS

Ragusa

Durazzo

Corfu

Janina

of EPIRUS

Duchy of ATHENS
Pty of ACHAEA

Mistra

Modon

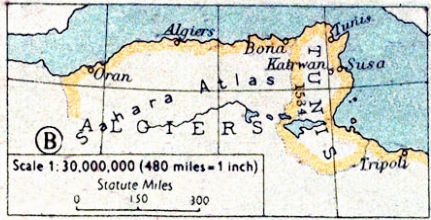
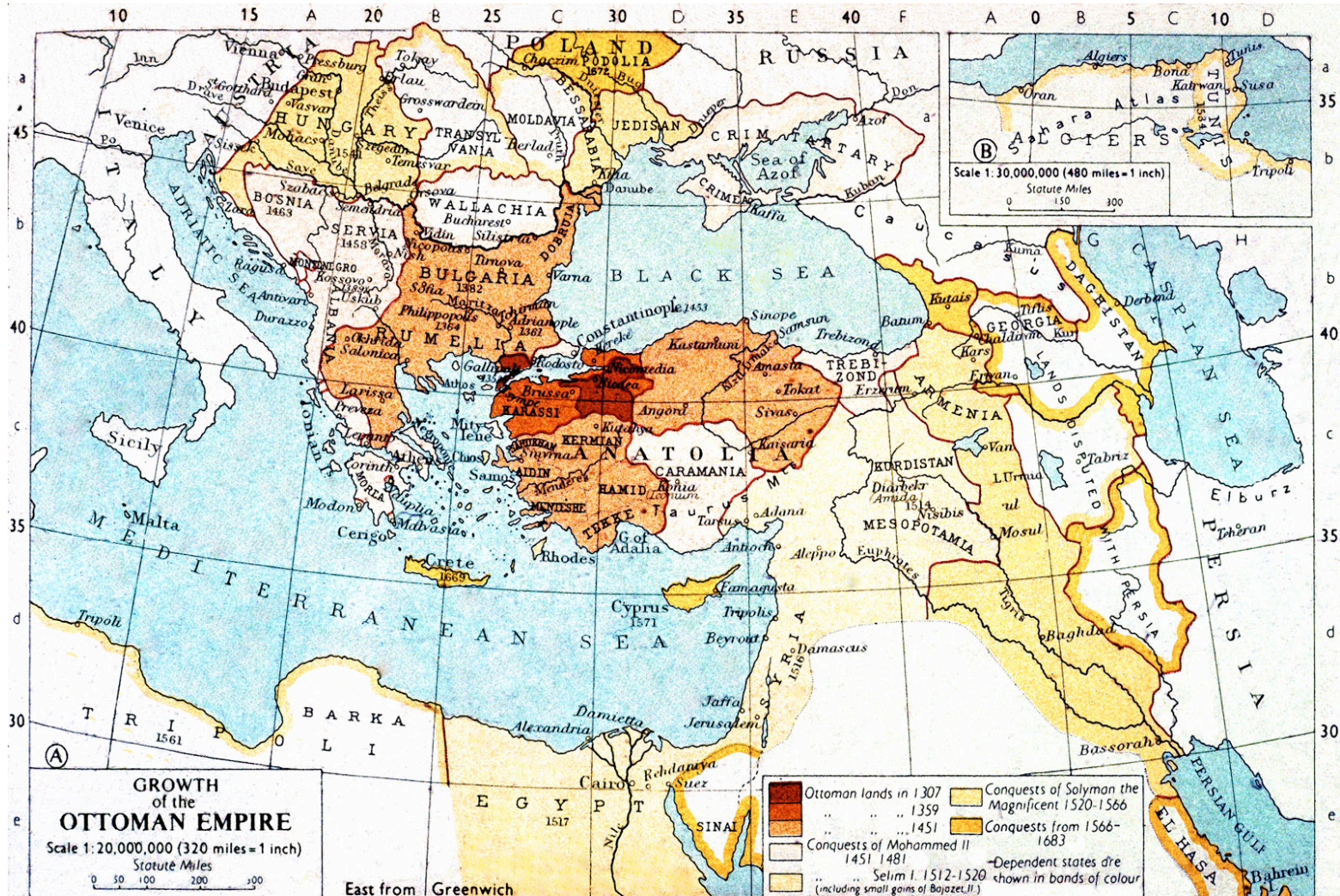
Negroponte

Duchy of NAXOS

Crete

Rhodes

● Genoese possessions

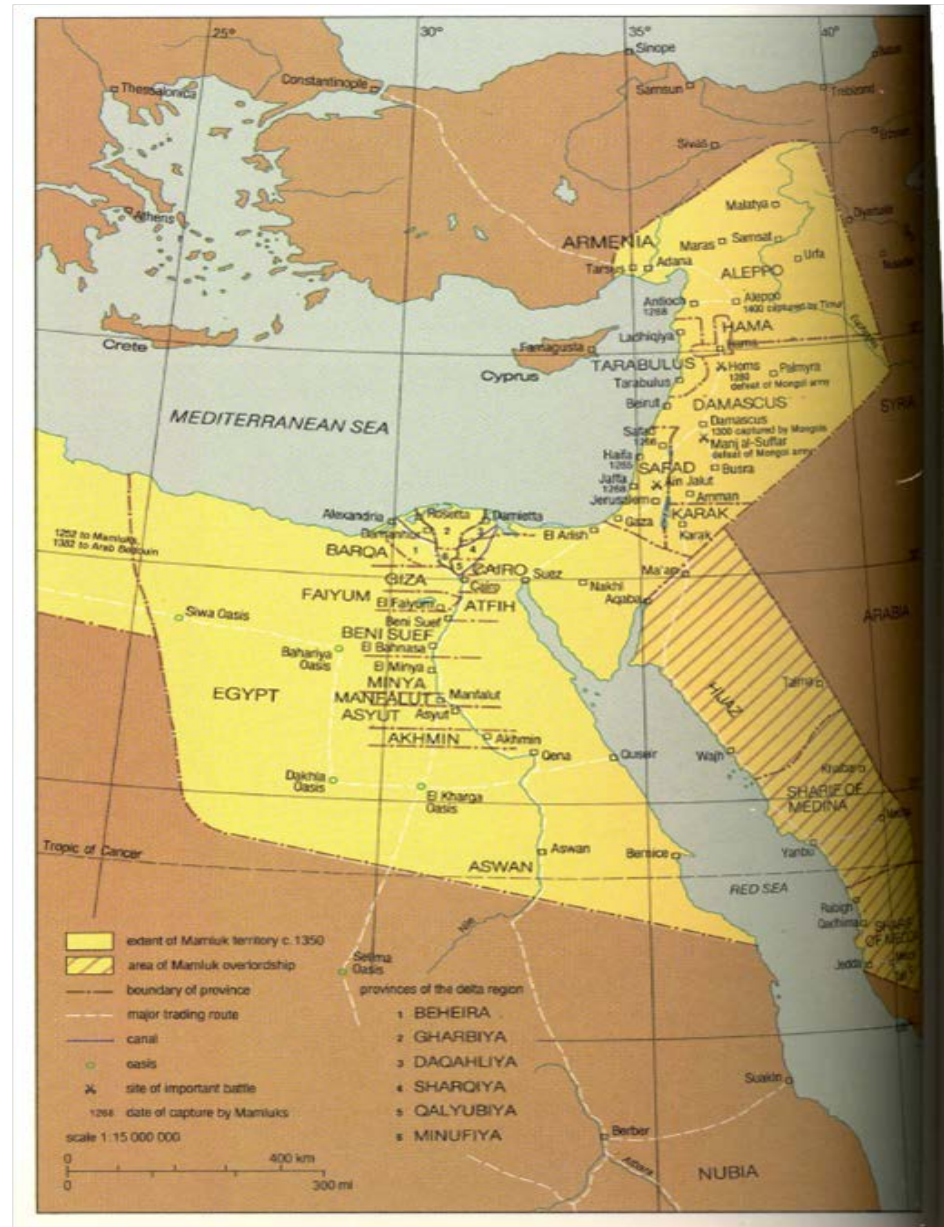




The Mamluk Domains

The Mamluk Sultanate displaced the Ayyubid dynasty in 1250, and ruled both Egypt and Syria until 1517, when they were conquered by the Ottoman Turks.

Mamluk regiments constituted the backbone of the late [Ayyubid](#) military. Each sultan and high-ranking amir had his private corps, and the sultan [as-Salih Ayyub](#) (r. 1240-1249) had especially relied on this means to maintaining power. His mamluks, numbering between 800 and 1,000 horsemen, were called the Bahris, after the Arabic word *bahr* (بحر), meaning sea or large river, because their barracks were located on the island of Rawda in the Nile. They were mostly drawn from among the Kipchak Turks who controlled the steppes north of the Black Sea

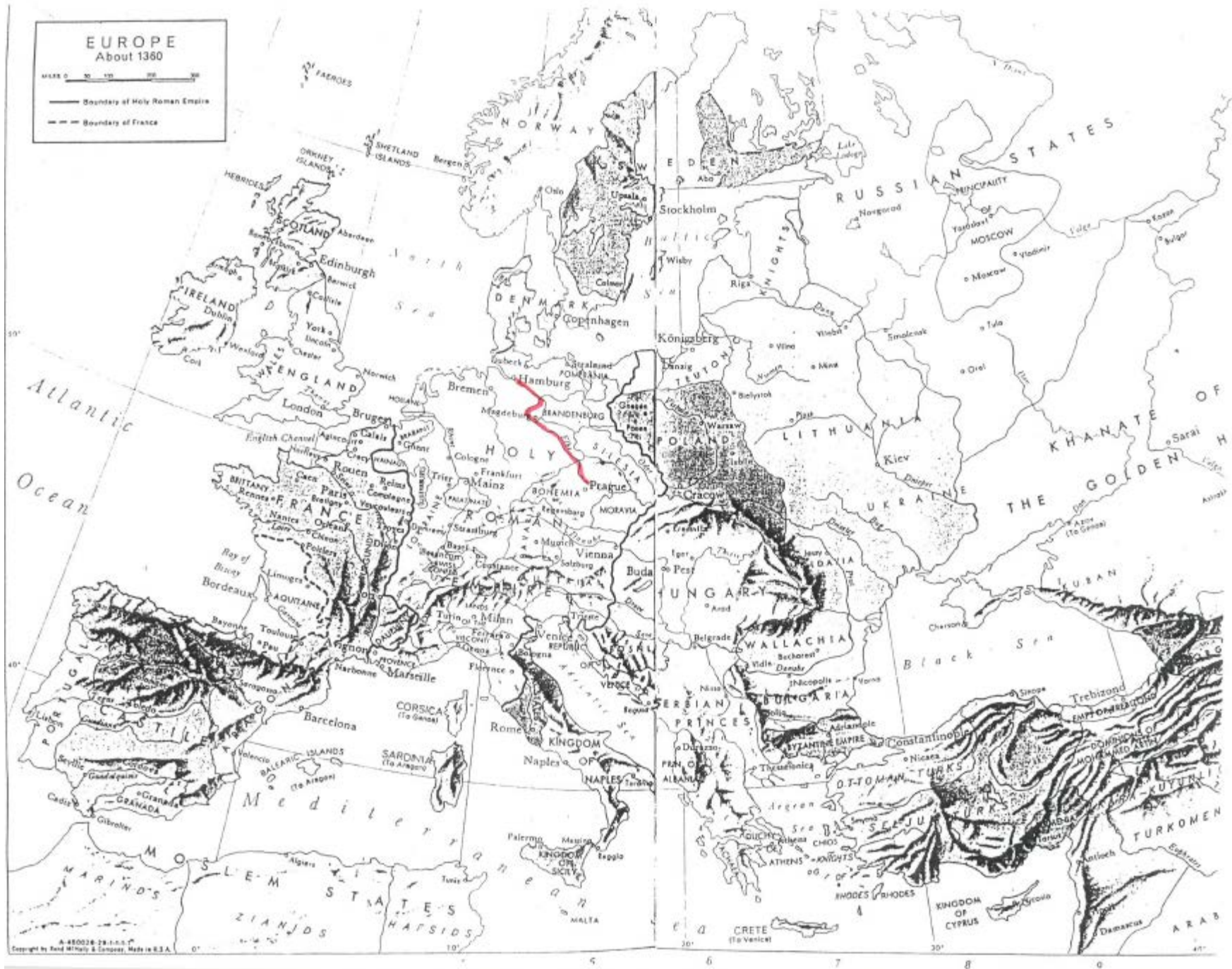


EUROPE

About 1360

Scale 0 50 100 200 Miles

— Boundary of Holy Roman Empire
- - - Boundary of France



Warfare & Transaction Costs 1

- (1) **Transaction Costs: Douglass North**
- (a) **all those costs involving in distributing goods & services:** from producers → consumers
- - **search and information costs**
- - **protection costs:** cost of enforcing contracts
- - **transportation and marketing costs**
- (b) **high fixed cost components:** subject to very considerable scale economies:
- → so that **market contractions** & disruptions **raised transaction costs**, often exponentially

Warfare & Transaction Costs 2

- (2) **Negative Aspects of the Shift from Continental Overland to Maritime Routes:**
- a) **chief consequence of military disruptions from and with rising costs of European warfare**
- b) **Decline of Champagne Fairs: 1290s – 1314:**
- - **had served as chief commercial hub** between north-western Europe and Mediterranean
- c) **Italian shift to direct maritime routes to England and Flanders:** from ca. 1320
- - also linked to resort to **bills of exchange**
- - most historians view this as a commercial advance

Warfare & Transaction Costs 3

- -3) **Negative aspect of shift to maritime routes:**
- a) **distance:** 7200 km from Venice to Bruges by sea, but only 1400 km overland (about 20%)
- b) **maritime routes serviced far fewer ports** and towns than overland routes
- c) **rapid rise in sea transport costs:** with increased naval warfare, piracy → need for heavily armed ships:
- - **Venetian galleys (1332)** safe but very expensive
- -d) **maritime trade intermittent: Venetian galleys to North:** only 35% of years from 1332 - 1400.

Warfare & Transaction Costs 4

- (d) **maritime routes were uncertain**: both about arrival, and at least the dates of arrival
- **Champagne & other fairs: annual cycle of fixed, known dates when merchants would meet: low transaction costs**
- (e) **Being: “lost at sea”** – with ocean storms, etc.
- - no known method to calculate longitude (before 1764) – just latitude
- (f) **consequence: maritime trade canalized long-distance trade between very few ports: north and south**
- - **Champagne Fairs: trade with hundreds of towns**

2 The expansion of the French monarchy, 987-1328

- French royal domain in 987
- French possessions of Henry II of England 1154 (Angvin Empire)
- French royal domain at death of Louis VII, 1180
- areas dependent on French monarchy in 1180
- English possessions in France in 1259
- additions to French royal domain before death of Louis IX, 1270
- additions before death of Philip IV in 1314
- additions before death of Charles IV in 1328



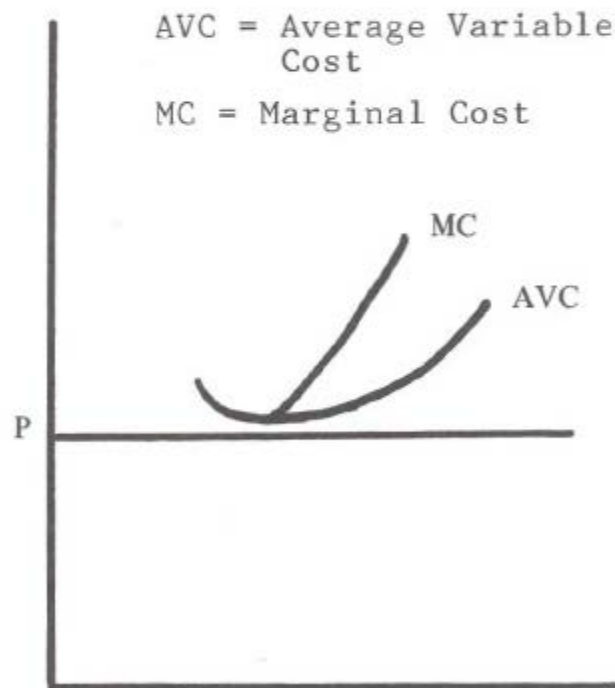
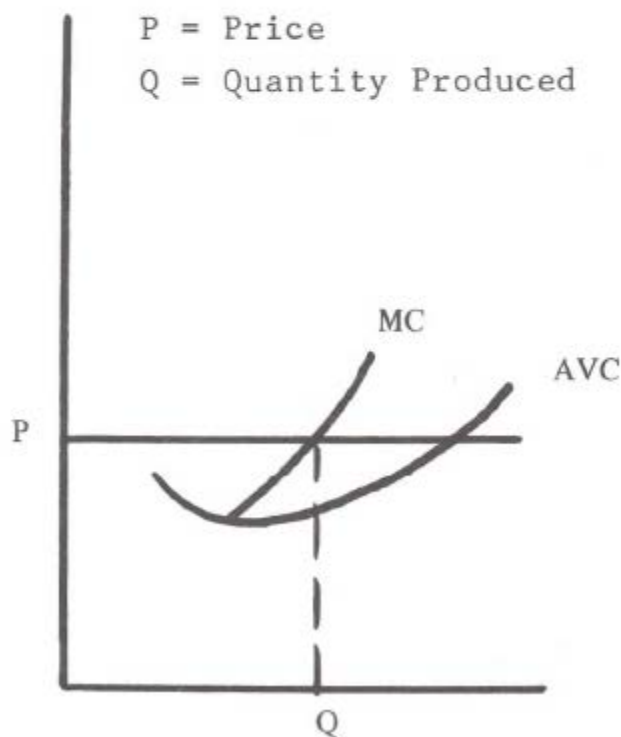


Warfare & Transaction Costs 5

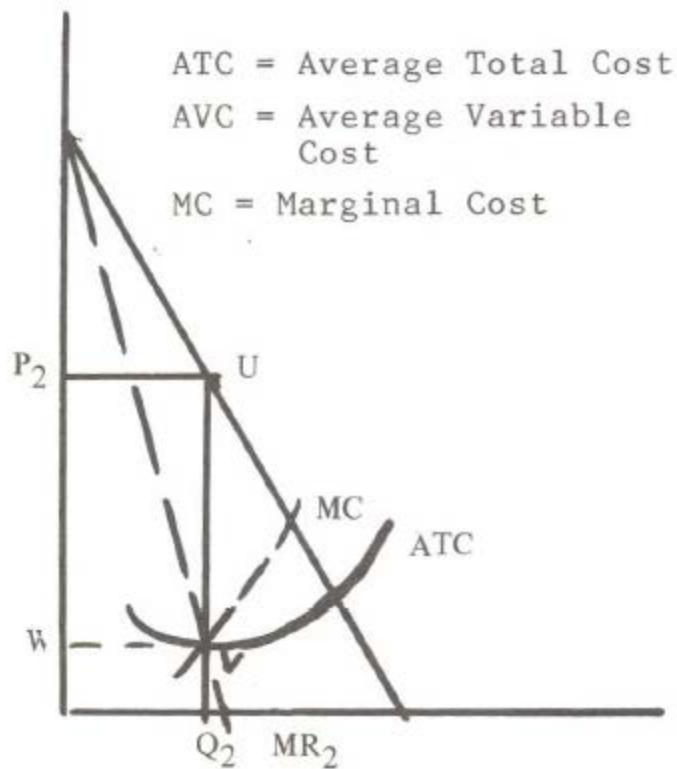
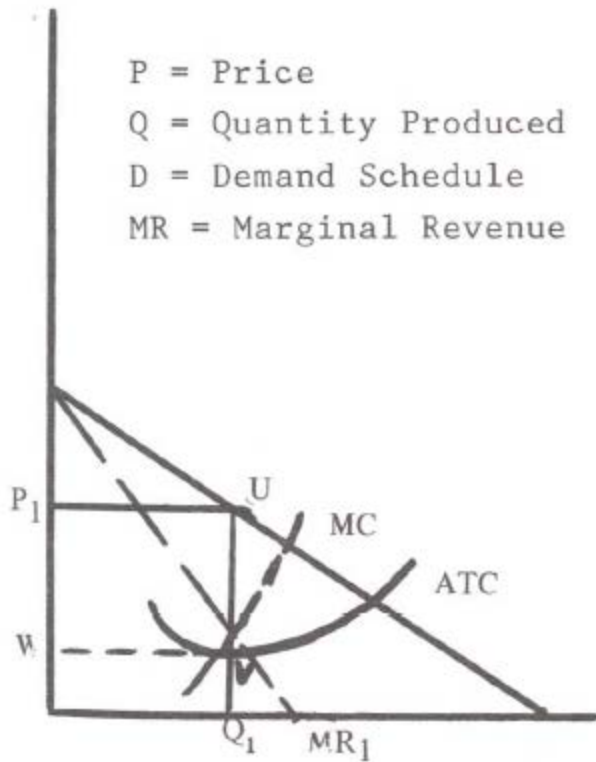
- 4) **Consequences: economic contraction**
- -a) **Van der Wee thesis: shift to maritime trade**
- - reduced volume & aggregate value of European trade
- - concentrated international trade in fewer towns – maritime cities led by Italians → fewer, wealthier hands
- -b) **Munro thesis: on rising transaction costs**
- **raised the cost-floor for int'l trade in cheaper products,**
- **→ reorienting trade to far smaller volumes of very high priced luxury goods,** for which transaction costs were a much smaller percent of total values
- **structural changes favoured price-makers over price-takers**
- e.g. textiles: → victory of the luxur woollens over worsteds

CLOTH PRODUCTION UNDER PURE AND MONOPOLISTIC COMPETITION

Pure Competition: the supply curve for the producer is that part of the Marginal Cost Curve rising above the Average Variable Cost Curve, which it intersects at its lowest point; the draper will not produce at a price below AVC, which is the "shut-down" price. He will produce to the point Q, where $MC = MR = P$ (Market Price) and where he will maximize profits. Demand for his cloth is perfectly elastic at this market price.



Monopolistic Competition: the draper will produce to the point Q, where $MC = MR$; and the vertical line intersecting that junction of MC and MR and then intersecting the Demand Schedule at U will determine his price P. His profit will be the area $PUVW = [P.Q] - [ATC.Q]$. The bottom line of this rectangle VW is the horizontal line tangent to ATC where it intersects the production point QU (where $MC = MR$).



C. The Italians in Late-Medieval International Commerce

- (1) **Factors in Italian Commercial Supremacy in Medieval Europe (from ca. 950 to ca. 1500)**
- (a) **Papacy**: support from & support of papacy
- - especially as tax collectors and bankers
- (b) **extensive urbanization surviving Roman Empire: so that extensive trade required-**
- for importing good & raw materials
- for exporting goods & services: for revenue

The Italians in Late-Medieval International Commerce 2

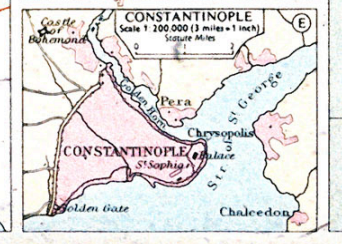
- (1) **Factors in Italian Commercial Supremacy**
- (c) **intermediary link between Europe and Asia:**
 - - **source for high valued Asian spices & luxury goods:**
 - - **historic ties with both the Byzantine Empire & Islamic Worlds**
- (d) **international structural changes favouring trade in luxury goods**
- (e) **innovations in banking & financial institutions:** especially the **bill of exchange**

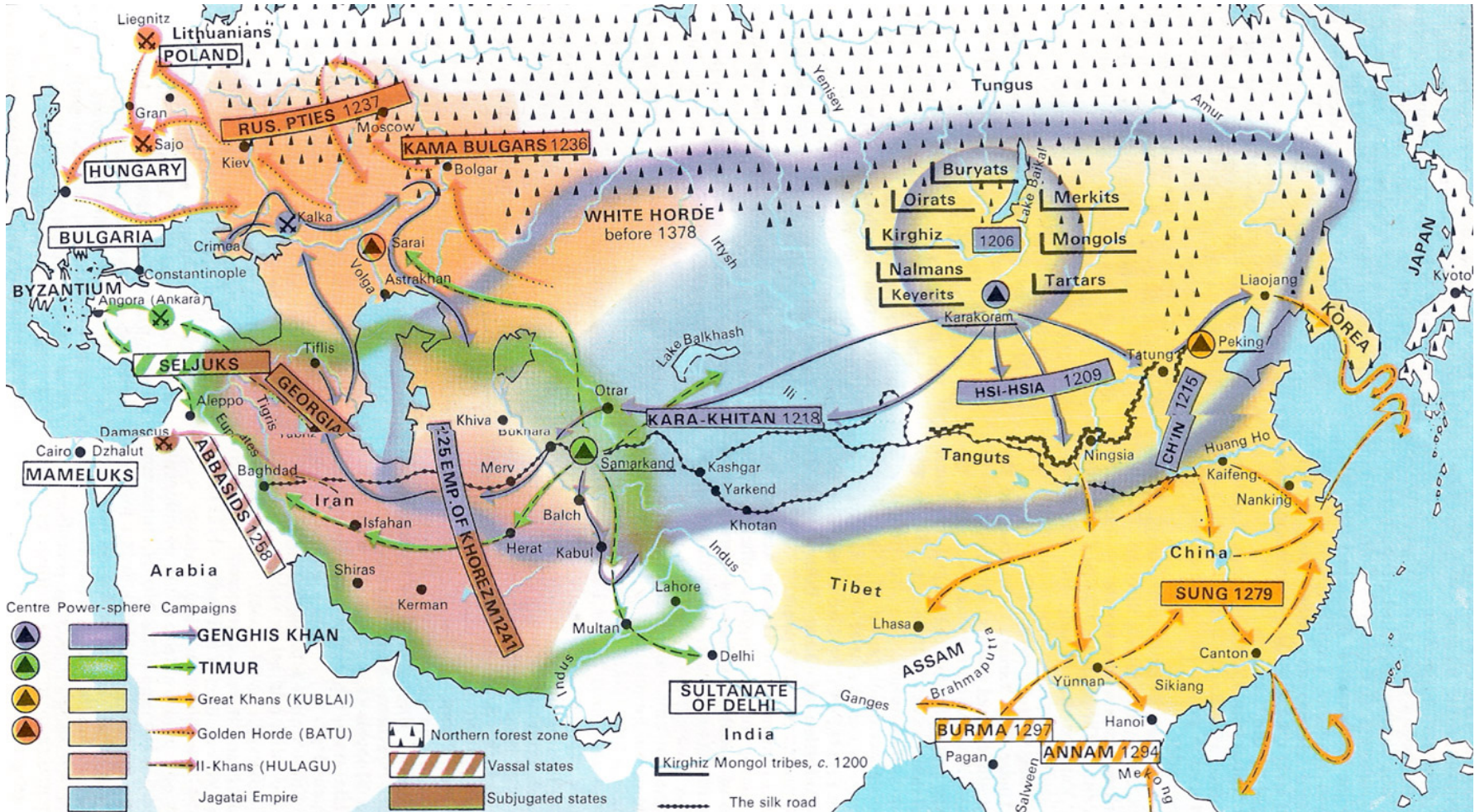
The Italians in Late-Medieval International Commerce 3

- (2) **The Papacy, the Levant, and the Italians:**
- a) **1291: Mamluk Egypt conquest of last Crusader states (Acre):** → Papal ban on Muslim trade
- b) **Italians (Genoa & Venice):** reoriented Asian trade to **Black Sea and Lesser Armenia** (Cilicia) on Mediterranean → links to the Mongol Empire & China
- c) **Genoese-Venetian war 1291-99: over Black Sea**
- d) **Civil wars in Mongol Khanates by 1340s:** disrupted this trade with Silk Route, Asia, China
- e) **Mamluks conquered the Cilician ports:** Lajazzo 1347

The Italians in Late-Medieval International Commerce 4

- f) **1345: Italians resumed trade with Mamluks by convincing Pope to sell them trade licences:**
- **Alexandria : chief Mamluk Egyptian port on Mediterranean:**
- g) **Problems with renewed Mamluk trade: from 1345**
- - ***Karimis* merchant cartel in Alexandria: exploited Italian merchants**
- - **Exorbitant papal fees to conduct this trade**
- - **Black Death: 1348-50: devastated Mamluk realms**
- h) **Barcelona (Spanish Aragon: Catalonia): new rival for Italians in the Levant trades**







ITALY, c. 1500

Scale 1:7,500,000 (120 miles = 1 inch)



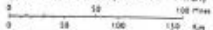
Popul States
Lands claimed by the Pope

Smaller independent states
Boundary of the Empire



GROWTH OF FLORENCE TO 1454

Scale 1:5,000,000 (80 miles = 1 inch)



Florence 1400
Acquisitions 1297-1454
Papal States





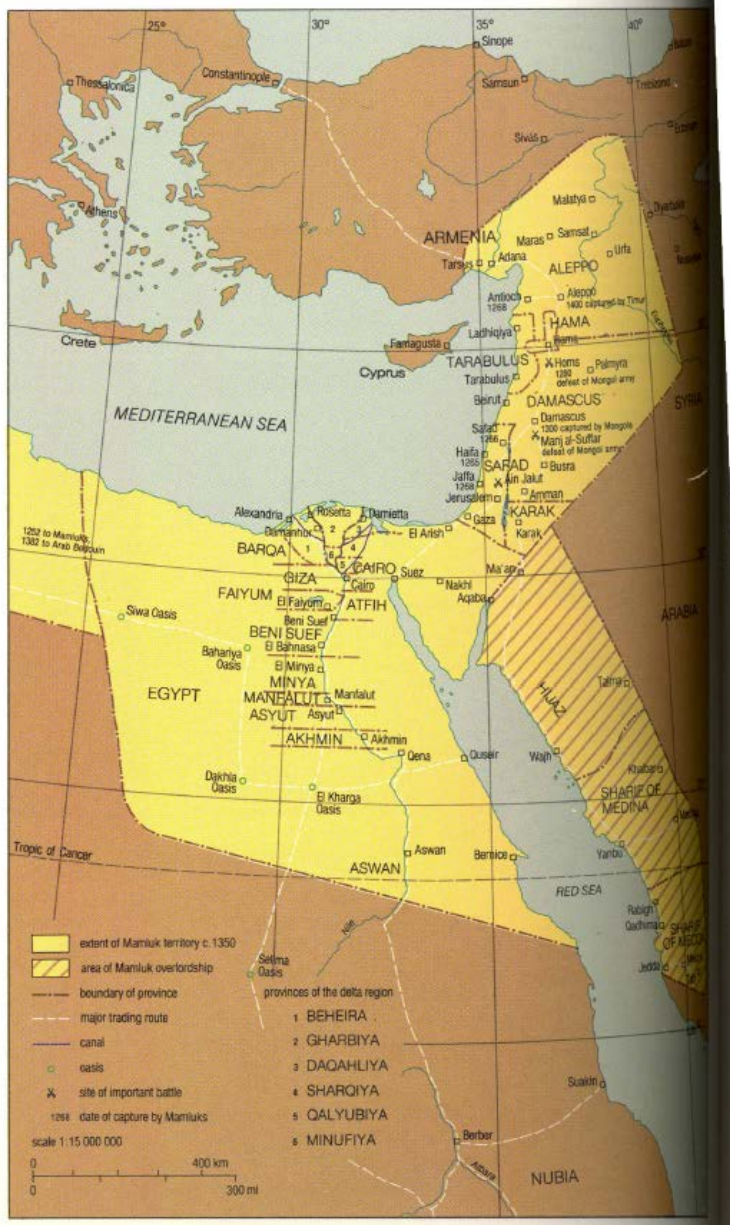


NOME DEI PRINCIPALI

| | | | |
|--------------|---------------|--------------|----------------|
| 1. San Marco | 2. San Pietro | 3. San Polo | 4. San Marco |
| 5. San Polo | 6. San Marco | 7. San Polo | 8. San Marco |
| 9. San Polo | 10. San Marco | 11. San Polo | 12. San Marco |
| 13. San Polo | 14. San Marco | 15. San Polo | 16. San Marco |
| 17. San Polo | 18. San Marco | 19. San Polo | 20. San Marco |
| 21. San Polo | 22. San Marco | 23. San Polo | 24. San Marco |
| 25. San Polo | 26. San Marco | 27. San Polo | 28. San Marco |
| 29. San Polo | 30. San Marco | 31. San Polo | 32. San Marco |
| 33. San Polo | 34. San Marco | 35. San Polo | 36. San Marco |
| 37. San Polo | 38. San Marco | 39. San Polo | 40. San Marco |
| 41. San Polo | 42. San Marco | 43. San Polo | 44. San Marco |
| 45. San Polo | 46. San Marco | 47. San Polo | 48. San Marco |
| 49. San Polo | 50. San Marco | 51. San Polo | 52. San Marco |
| 53. San Polo | 54. San Marco | 55. San Polo | 56. San Marco |
| 57. San Polo | 58. San Marco | 59. San Polo | 60. San Marco |
| 61. San Polo | 62. San Marco | 63. San Polo | 64. San Marco |
| 65. San Polo | 66. San Marco | 67. San Polo | 68. San Marco |
| 69. San Polo | 70. San Marco | 71. San Polo | 72. San Marco |
| 73. San Polo | 74. San Marco | 75. San Polo | 76. San Marco |
| 77. San Polo | 78. San Marco | 79. San Polo | 80. San Marco |
| 81. San Polo | 82. San Marco | 83. San Polo | 84. San Marco |
| 85. San Polo | 86. San Marco | 87. San Polo | 88. San Marco |
| 89. San Polo | 90. San Marco | 91. San Polo | 92. San Marco |
| 93. San Polo | 94. San Marco | 95. San Polo | 96. San Marco |
| 97. San Polo | 98. San Marco | 99. San Polo | 100. San Marco |



| | | | |
|---------------|----------------|---------------|----------------|
| 101. San Polo | 102. San Marco | 103. San Polo | 104. San Marco |
| 105. San Polo | 106. San Marco | 107. San Polo | 108. San Marco |
| 109. San Polo | 110. San Marco | 111. San Polo | 112. San Marco |
| 113. San Polo | 114. San Marco | 115. San Polo | 116. San Marco |
| 117. San Polo | 118. San Marco | 119. San Polo | 120. San Marco |
| 121. San Polo | 122. San Marco | 123. San Polo | 124. San Marco |
| 125. San Polo | 126. San Marco | 127. San Polo | 128. San Marco |
| 129. San Polo | 130. San Marco | 131. San Polo | 132. San Marco |
| 133. San Polo | 134. San Marco | 135. San Polo | 136. San Marco |
| 137. San Polo | 138. San Marco | 139. San Polo | 140. San Marco |
| 141. San Polo | 142. San Marco | 143. San Polo | 144. San Marco |
| 145. San Polo | 146. San Marco | 147. San Polo | 148. San Marco |
| 149. San Polo | 150. San Marco | 151. San Polo | 152. San Marco |
| 153. San Polo | 154. San Marco | 155. San Polo | 156. San Marco |
| 157. San Polo | 158. San Marco | 159. San Polo | 160. San Marco |
| 161. San Polo | 162. San Marco | 163. San Polo | 164. San Marco |
| 165. San Polo | 166. San Marco | 167. San Polo | 168. San Marco |
| 169. San Polo | 170. San Marco | 171. San Polo | 172. San Marco |
| 173. San Polo | 174. San Marco | 175. San Polo | 176. San Marco |
| 177. San Polo | 178. San Marco | 179. San Polo | 180. San Marco |
| 181. San Polo | 182. San Marco | 183. San Polo | 184. San Marco |
| 185. San Polo | 186. San Marco | 187. San Polo | 188. San Marco |
| 189. San Polo | 190. San Marco | 191. San Polo | 192. San Marco |
| 193. San Polo | 194. San Marco | 195. San Polo | 196. San Marco |
| 197. San Polo | 198. San Marco | 199. San Polo | 200. San Marco |



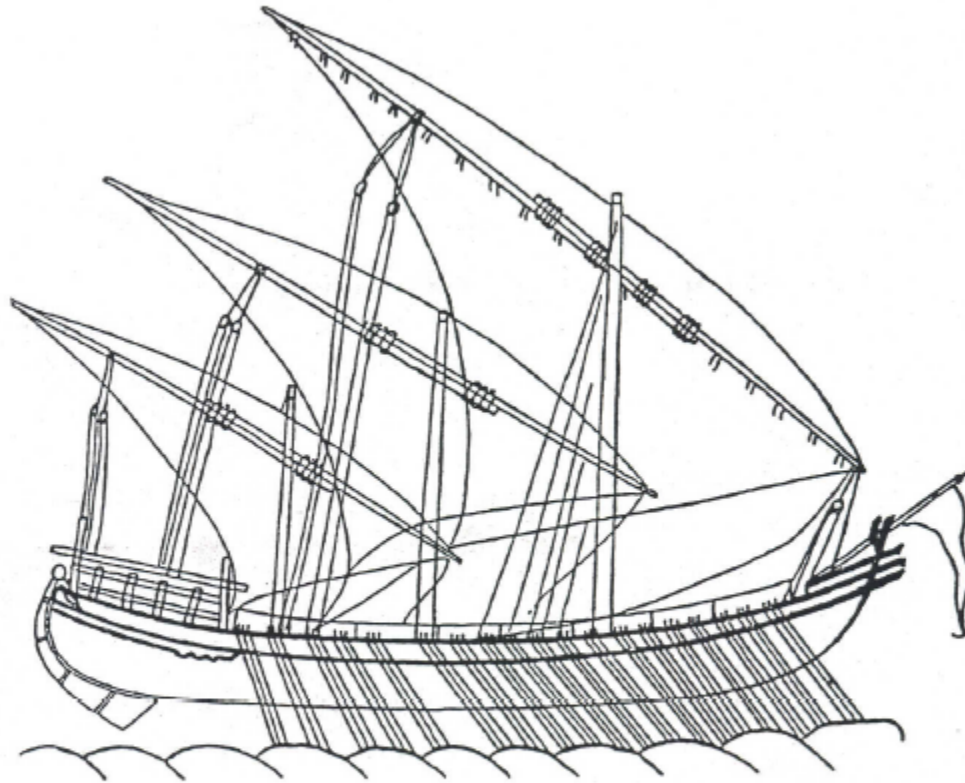
The Italians in Late-Medieval International Commerce: Venice 1

- (3) **Venetian Commercial Supremacy: the role of the Mamluk (Muslim) Levant**
- (a) **the folly of Venice's rivals: Genoa & Barcelona insisted on piracy and corsair wars against Muslims**, especially Mamluk shipping & coastal towns
- (b) **Venice, refusing to participate, built up its fleets of heavily armed galleys**: virtually impervious to naval & piracy attacks
- (c) **Venice cultivated diplomatic relations with the Mamluk Sultans:**
- - **Mamluk 1370 Peace Treaty: fruits of victory** → opened up a vast new trade in Syrian cotton (Beirut), as well as in eastern spices at Alexandria

The Italians in Late-Medieval International Commerce: Venice 2

- (d) **War of Chioggia, 1378 – 1381**: continuation of 1350-55 wars with Genoa
- **Genoa on verge of victory** -- when Venetians inflicted a crushing defeat: **ending Genoese power** in eastern Mediterranean forever
- (e) **by 1390s: Venice reaching height of its prosperity**, in over a century
- (f) **But Barcelona continued to be a threat**, especially under Alfonso V of Aragon (1416-58)
- – until **civil wars of 1462-78** debilitated Barcelona
- (g) **Genoa**: continued to decline in both eastern & western Mediterranean trades

17: Venetian Great Galley from a Treatise on Shipbuilding, 1445



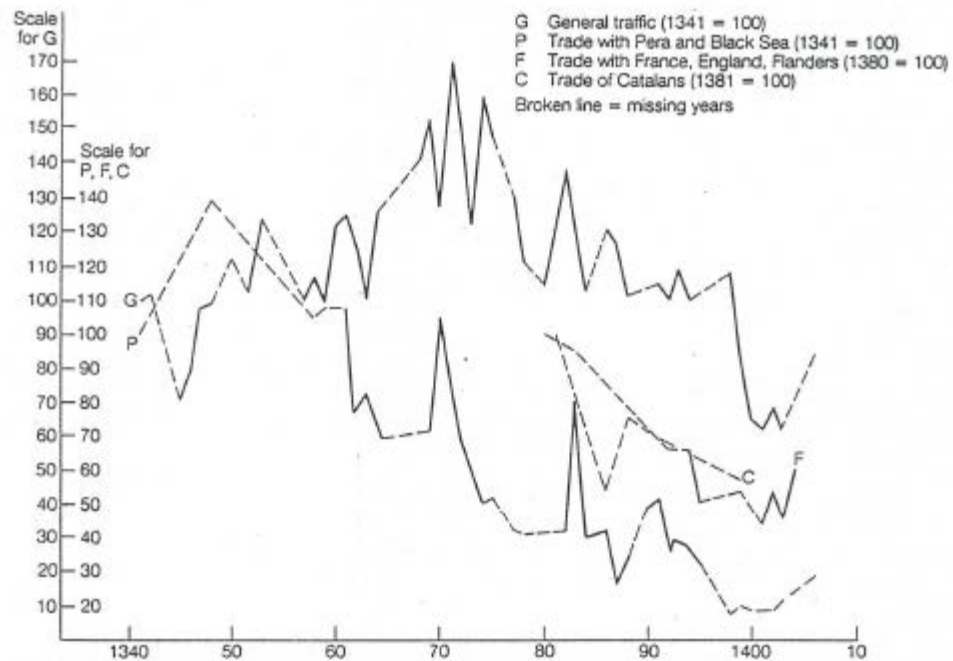


Figure 10.6 Genoese maritime commerce based on customs revenues
 Source: J. Day, *Les douanes de Gènes, 1376-1377* (Paris, 1963), vol. I, pp. xvi-xxii.

The Italians in Late-Medieval International Commerce: Venice 3

- (4) **Venetian Supremacy in the 15th century:**
- a) **Levant Trade:** chief source of power and prosperity: Venetian share rose from 40% in 1400 to 65% in 1450s
- b) **Temporary Mamluk threat: 1425-38:** Sultan Barsby imposed monopoly on spice trade
 - -- Venice forced him to destroy the *karimis* cartel
- c) **Mamluk Spice prices fell by 50%** -- remained low, enhancing Venetian prosperity to the 1490s

The Italians in Late-Medieval International Commerce: Venice 4

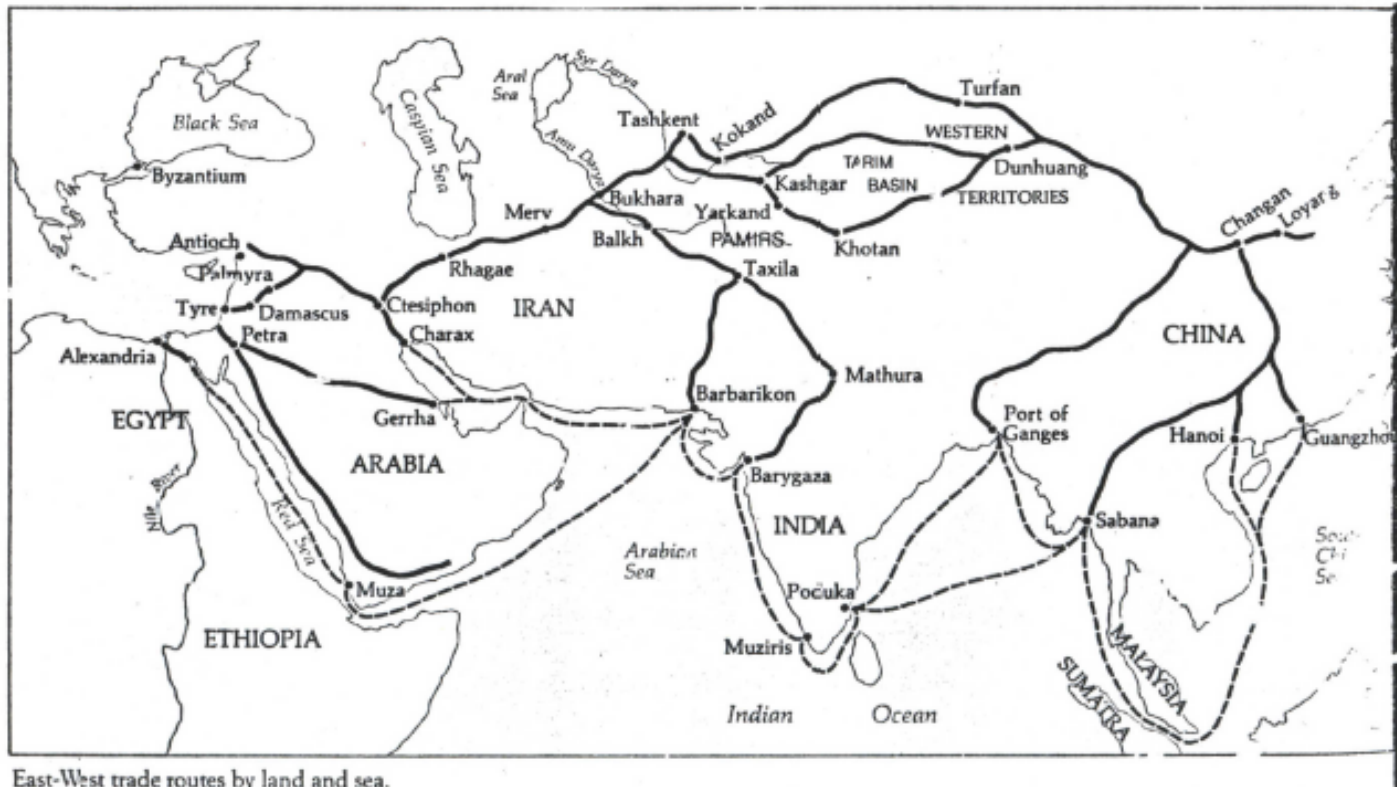
- d) **Spice trades:** 60% of Venetian expenditures in the 1490s:
- e) **Other trades:** in Syrian cotton and South German silver and copper (see next series of slides and the rise of Antwerp)
- f) **Threats to Venetian Trade from the 1490s:**
 - **Portugal:** Vasco da Gama reaches Calicut, India: 1498 (spices)
 - **Ottoman Empire:** wars with Venice; conquest of Mamluks (Egypt, Syria, Palestine: 1517)



The Italians in Late-Medieval International Commerce: Venice 5

- (5) **Economics of Italian Trade with Levant:**
- (a) **spices: by far the chief imports** into Europe, by value
 - -(i) **chief spices:** pepper, ginger, cinnamon: see next list
 - - but also wide range of medicinal products
 - -(ii) **necessities or luxuries**
 - - **Spices were not a preservative:** salt filled that role
 - - but social necessity for the upper classes: in same way that luxury textiles were
- b) **demand inelastic → made spices most lucrative component** of late medieval international trade

The Spice Trade Routes: to 1500

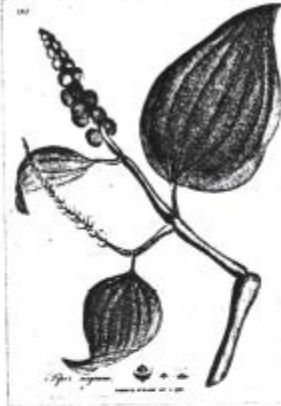


MEDIEVAL SPICES

and their reputed or deemed medicinal properties:

| SPICES in order of importance | PROPERTIES |
|-------------------------------|---|
| PEPPER | The most widely used spice, then and now, but not for any significant medical values |
| GINGER | Next most widely used spice: a digestive, carminative (to counteract flatulence), stimulant; to counteract anaemia and liver complaints; to ward off colds. |
| CINNAMON | Third most important spice: also as a stimulant, carminative, astringent; some reputed qualities as a food preservative. |
| CLOVES | Digestive, stimulant, local anaesthetic (e.g., toothaches) |
| CARDAMOM | Digestive; to counteract halitosis (bad breath), headaches, fevers, colds |
| CUMIN | Digestive |
| ANISE | Digestive |
| NUTMEG & MACE | Digestive, carminative, stimulant; cure for colic |
| SAFFRON | The world's most expensive herb or spice, then and now. A stimulant; cure for headaches, heart palpitations, fainting fits, dropsy, gastric ulcers |

PEPPER PLANT



GINGER PLANT



CINNAMON
PLANT



SPICES IN MEDIEVAL EUROPEAN AND MODERN INDIAN CUISINE

LATE MEDIEVAL RECIPES: LATE 14TH - EARLY 15TH CENTURY FRENCH AND ENGLISH

POMMEAULX:

| | |
|--|-----------------------------------|
| 2 lb. ground meat: beef, lamb, pork, veal or a combination thereof | ½ tsp. ginger, ground |
| 2 eggs, well beaten | ½ tsp. ground mace |
| parsley | ½ tsp. ground cardamom |
| rice flour | 6 cloves; or ½ tsp. ground cloves |
| | chopped currants to taste |
| | almonds, ground |

1. In place of eggs, substitute a mixture of ground almonds, water or beef bouillon, rice flour; with ½ cup boiling water per tablespoon of ground almonds and 1 tablespoon of rice flour. Or, this mixture may also be used with the beaten eggs, but preferably one egg only.
2. In a mixing bowl, mix the ground meat with the eggs, rice flour, spices, chopped currants, and ground almonds; quickly stir-fry in a large skillet or wok; turn down the heat and simmer; add sprinkled parsley when serving.

CAPOUN Y-ROSTYDE WITH BLACKKE SAWSE: Roast Capon with Black Sauce (English)

| | |
|--|-------------------------|
| 1 capon (or broiling chicken), about 6 lb. | 1/4 tsp. ground anise |
| 1 capon liver, cooked and well ground | ½ tsp. ground ginger |
| 1/4 cup of bread crumbs | ½/ tsp. ground cardamom |
| wine vinegar or lemon juice | ½ tsp. ground cinnamon |

Roast the capon and make a sauce with the ingredients listed above, mixed with the capon drippings and sufficient water to make a gravy.

PIKE IN GALENTYNE: Galantine of Pike (Late medieval French)

| | |
|--|------------------------------|
| Pike or pickerel: 1 whole, about 2 - 3 lb. | ½ tsp. ground cinnamon |
| 1 large onion, chopped | ½ tsp. ground ginger |
| 2 slices of whole wheat bread | 1/4 tsp. ground black pepper |
| 1.5 cups of white wine | 1/4 tsp. galingale |
| 1 tablespoon of white-wine vinegar | 1/4 tsp. ground cloves |
| 2 sprigs of parsley | |

BOURBELIER DE SANGLIER: Loin of Wild Boar in Boar's Tail Sauce (late-medieval French)

| | |
|---|--|
| Pork Loin Roast, 4 - 6 lb. (or wild boar) | 16 cloves: or enough to stud the roast |
| 2 tablespoons of bread crumbs | ½ tsp. ground ginger |
| salt to taste | ½ tsp. ground cardamom |
| ½ cup hot water | ½ tsp. ground black pepper (peppercorns) |
| ½ cup red wine | ½ tsp. ground cinnamon |
| 1/4 cup wine vinegar | 1/4 tsp. ground cloves |
| | 1/4 tsp. ground nutmeg |

Roast the park, with cloves studded in the pork loin; then make a sauce with the roast drippings, the above ingredients, and ½ cup of boiling water.

MOUTONY-ROSTED WITH SAWSE CAMELYNE: Roast Lamb with Cameline Sauce (15th century English)

| | |
|------------------------------|---|
| Leg of lamb, about 2 - 3 lb. | ½ tsp. ground ginger |
| 2 tablespoons of breadcrumbs | ½ tsp. of ground cinnamon |
| 1/4 cup of red currants | 1/4 tsp. of ground cloves |
| ½ cup of red wine vinegar | 1/4 cup of nuts: walnuts and/or almonds |

Roast the lamb; then make a sauce with the roast drippings, the above ingredients, and ½ cup of boiling water, if needed for the gravy.

CONTEMPORARY SOUTH ASIAN RECIPES:

MOORGEE KURMA: Chicken Curry, with Poppy Seeds (Modern Indian)

| | |
|--|--------------------------------|
| 1 broiler chicken, cut up: 2.5 to 3.5 lb | 8 cloves, crushed |
| 1 cup plain yoghurt | 1 tsp ground cinnamon |
| 4 medium onions, finely sliced | 1 tsp ground ginger |
| 5 tablespoons vegetable shortening, or oil | 1 tsp crushed garlic |
| 2 cups hot water | 1 tsp red pepper flakes |
| salt to taste | ½ tsp ground ginger |
| | 1 tablespoon coriander, ground |
| | ½ coconut, ground |
| | 1 tablespoon poppy seeds |
| | 1 lime: juiced |
| | 24 cashew nuts |

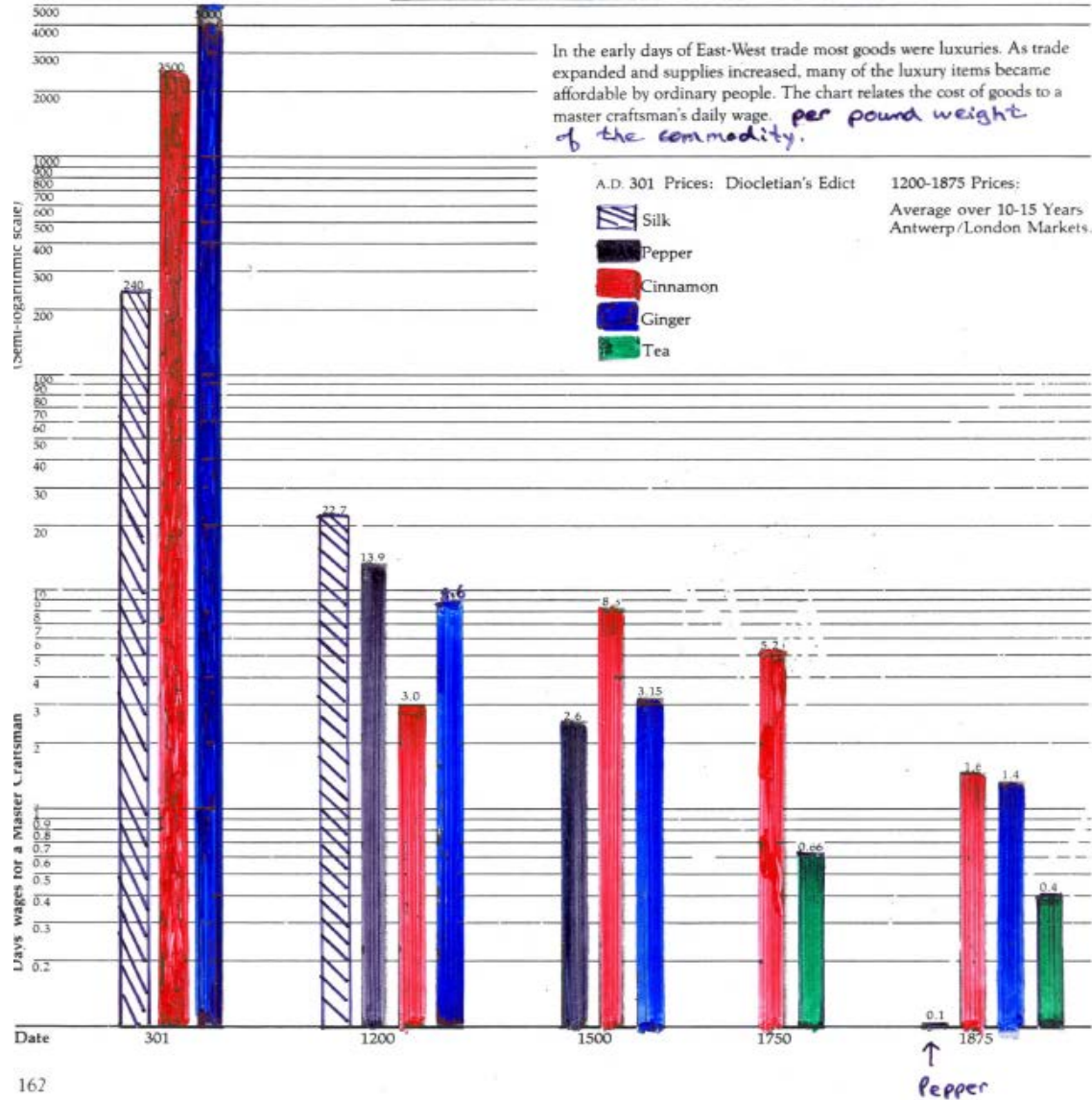
1. Brown onions in large skillet or wok and add separately: cloves, cinnamon, ginger (1 tsp), garlic, yoghurt; mix thoroughly, and then add the chicken; and stir fry for 5 minutes at medium heat.
2. In a small skillet, heat vegetable oil/shortening; and add red pepper flakes, ½ tsp. ginger, and coriander; stir-fry to 3 minutes, and then add to the chicken mixture; add water, and cover tightly, and simmer slowly, for one hour.
3. Grind the coconut and poppy seeds together (with a cuisinart or blender) and add the coconut paste to the chicken about 20 minutes before the end; with the heat off, add the cashew nuts and lime juice.

SHAHI KOFTA: Indian Meatballs (Modern)

| | |
|--|--|
| 1 medium onion, quartered | 1 one-inch piece of ginger root (2 tsp ground) |
| 1 lb. lamb or beef, ground (minced) | 6 black peppercorns |
| 1 egg, well beaten | ½ tsp. cinnamon, ground |
| 1 large onion, finely sliced | ½ tsp. coriander seeds |
| 4 tablespoons vegetable oil or shortening | 1 tablespoon ground coriander |
| ½ cup of boiling water | 1 tsp turmeric, ground |
| 1 green or red bell pepper, finely chopped | 1 tablespoon cumin seeds |
| | 1 tsp. cayenne red pepper or chili powder |
| | ½ tsp. ground mace |
| | ½ tsp. ground cardamom |

1. Place quartered onion, ginger, peppercorns, cinnamon, coriander seeds in a cuisinart or food blender; and grind to a fine paste.
2. In a mixing bowl, place ground meat (beef or lamb), egg, ground onions, and the spice paste mixture and mix well; form into small marble-sized meatballs.
3. In a large skillet or wok, quickly fry (sauté) the meatballs and light brown; remove from heat.
4. In the same skillet, add sliced onion and brown; then add coriander, turmeric, cumin seeds, red pepper or chili powder, mace, and cardamom. Stir-fry for a few minutes; add the ½ cup water and meatballs, cooking slowly until the gravy is thick.
5. Serve with steamed or fried rice (which can be mixed with frozen peas and mushrooms).

The Relative Costs of Asian Silks and Spices in Terms of a
Master Craftsman's Daily Wage, 301 - 1875



**Prices of Spices in Antwerp, London, and Oxford in 1438-39
in pence groot Brabant and English pence sterling, compared to prices in Toronto
in Nov. 2011 (in Canadian dollars) per lb. avoirdupois and kilograms
and the quantities that could be purchased with a master carpenter's daily wage**

| Name of the Spice | Antwerp d. gr. Brab. per lb. | Antwerp d. gr. Brab. per kg. | Oxford d. ster. per lb. | Oxford d. ster. per kg | London d. ster. per lb. | London d. ster. per kg. | Toronto 2011 \$ CAD per lb. | Toronto 2011 \$ CAD per kg. |
|--------------------------|---|---|--|---|--|--|--|---|
| Cloves | 74.63 | 153.14 | 48.00 | 105.82 | 35.56 | 78.39 | 9.48 | 20.900 |
| Cinnamon | 22.54 | 46.26 | 20.00 | 44.09 | 24.15 | 53.24 | 3.49 | 7.700 |
| Ginger | 15.55 | 31.90 | 28.00 | 61.73 | 12.00 | 26.46 | 9.12 | 20.100 |
| Mace | | | 36.00 | 79.37 | | | 36.29 | 80.000 |
| Pepper | 20.21 | 41.48 | 12.75 | 28.11 | 18.03 | 39.74 | 8.57 | 18.900 |
| Saffron | 373.15 | 765.70 | 176.00 | 388.01 | 182.86 | 403.13 | 4,077.80 | 8,990.000 |
| White Sugar | 12.44 | 25.52 | 24.00 | 52.91 | 16.00 | 35.27 | 4.81 | 10.600 |
| | Antwerp Daily Wage in d groot 12 hrs | Antwerp Daily Wage in d groot 12 hrs | Oxford Daily Wage in d ster. 12 hrs | Oxford Daily Wage in d ster. 12hrs | London Daily Wage in d ster. 12 hrs | London Daily Wage in d ster. 12 hrs | Toronto Daily Wage in \$ CAD \$35.39 per hr for 8 hours | Toronto Daily Wage in \$ CAD* \$35.39 per hr for 8 hours |
| | 10.00d | 10.00d | 6.00d | 6.00d | 8.00d | 8.00d | \$283.12 | \$283.12 |
| Name of the Spice | lb. bought with daily wage | grams bought with daily wage | lb. bought with daily wage | grams bought with daily wage | lb. bought with daily wage | grams bought with daily wage | lb. bought with daily wage | grams bought with daily wage |
| Cloves | 0.13 | 65.30 | 0.13 | 56.70 | 0.22 | 102.06 | 29.86 | 13,546.411 |
| Cinnamon | 0.44 | 216.17 | 0.30 | 136.08 | 0.33 | 150.25 | 81.06 | 36,768.831 |
| Ginger | 0.64 | 313.44 | 0.21 | 97.20 | 0.67 | 302.39 | 31.05 | 14,085.572 |
| Mace | | | 0.17 | 75.60 | | | 7.80 | 3,539.000 |
| Pepper | 0.49 | 241.11 | 0.47 | 213.46 | 0.44 | 201.28 | 33.03 | 14,979.894 |
| Saffron | 0.03 | 13.06 | 0.03 | 15.46 | 0.04 | 19.84 | 0.07 | 31.493 |
| White Sugar | 0.80 | 391.80 | 0.25 | 113.40 | 0.50 | 226.80 | 58.88 | 26,709.434 |

**Prices of Spices in Antwerp, London, and Oxford in 1438-39
in pence groot Brabant and English pence sterling, compared to prices in Toronto
in Nov. 2011 (in Canadian dollars) per lb. avoirdupois and kilograms
and the quantities that could be purchased with a master carpenter's daily wage**

| | Antwerp Daily Wage in d groot 12 hrs | Antwerp Daily Wage in d groot 12 hrs | Oxford Daily Wage in d ster. 12 hrs | Oxford Daily Wage in d ster. 12hrs | London Daily Wage in d ster. 12 hrs | London Daily Wage in d ster. 12 hrs | Toronto Daily Wage in \$ CAD \$35.39 per hr for 8 hours | Toronto Daily Wage in \$ CAD* \$35.39 per hr for 8 hours |
|-------------|---|---|--|---|--|--|---|--|
| | 10.00d | 10.00d | 6.00d | 6.00d | 8.00d | 8.00d | \$283.12 | \$283.12 |
| Spice | No. of Days' Wages To Buy 1 lb. | No. of Days' Wages To Buy 100 g. | No. of Days' Wages To Buy 1 lb. | No. of Days' Wages To Buy 100 g. | No. of Days' Wages To Buy 1 lb. | No. of Days' Wages To Buy 100 g. | No. of Minutes to Buy 1 lb. | No. of Minutes to Buy 100 g |
| Cloves | 7.46 | 1.53 | 8.00 | 1.76 | 4.44 | 0.98 | 16.07 | 3.543 |
| Cinnamon | 2.25 | 0.46 | 3.33 | 0.73 | 3.02 | 0.67 | 5.92 | 1.305 |
| Ginger | 1.55 | 0.32 | 4.67 | 1.03 | 1.50 | 0.33 | 15.46 | 3.408 |
| Mace | | | 6.00 | 1.32 | | | 61.52 | 13.563 |
| Pepper | 2.02 | 0.41 | 2.13 | 0.47 | 2.25 | 0.50 | 14.53 | 3.204 |
| Saffron | 37.31 | 7.66 | 29.33 | 6.47 | 22.86 | 5.04 | 6,913.47 | 1,524.159 |
| White Sugar | 1.24 | 0.26 | 4.00 | 0.88 | 2.00 | 0.44 | 8.15 | 1.797 |

Spice Values in Terms of the Purchasing Power of Skilled Labour in London & Oxford
 Quantities of Spices That a Master Mason Could Purchase with One Day's Wages
 and Number of Days' Wages Required to Buy One Pound of Spices
 in 1437 - 39

London: Daily wage for a skilled master mason or carpenter: 8d sterling

Oxford: Daily wage for a skilled master mason or carpenter: 6d sterling

| | LONDON | LONDON | OXFORD | OXFORD |
|----------|------------------------------|-----------------------|------------------------------|-----------------------|
| SPICE | ounces bought with day's pay | days' pay to buy 1 lb | ounces bought with day's pay | days' pay to buy 1 lb |
| PEPPER | 7.1 | 2.25 | 5.3 | 3.02 |
| GINGER | 10.7 | 1.50 | 8.0 | 2.00 |
| CINNAMON | 5.3 | 3.02 | 4.0 | 4.00 |
| CLOVES | 3.6 | 4.44 | 2.7 | 5.93 |
| SAFFRON | 0.7 | 22.86 | .05 | 32.00 |
| SUGAR | 8.0 | 2.00 | 6.0 | 2.67 |
| | | | | |

QUANTITIES OF SPICES AND OTHER COMMODITIES

that a London Master Mason Could Purchase with One Day's Pay (8d sterling)

in 1421 - 23

| Commodity | Number | Unit | Commodity | Number | Unit |
|-----------|--------|---------|--------------------|--------|---------|
| Pepper | 6.4 | ounces | capons | 2.0 | number |
| Ginger | 7.1 | ounces | chickens | 4.9 | number |
| Cinnamon | 6.4 | ounces | geese | 1.1 | number |
| Cloves | 3.6 | ounces | rabbits | 3.2 | number |
| Sugar | 8.0 | ounces | pork roast | 1.6 | number |
| Saffron | 1.5 | ounces | pork filets | 8.0 | number |
| salt | 32.0 | pints | candles | 5.3 | number |
| flour | 3.2 | gallons | coal | 6.9 | bushels |
| red wine | 1.1 | gallons | canvas | 1.7 | yards |
| penny ale | 10.7 | gallons | broadcloth dyed | 0.4 | yards |
| milk | 8.0 | gallons | | | |
| cream | 2.0 | gallons | | | |

The Italians in Late-Medieval International Commerce: Venice 6

- (5) **Economics of Italian Trade with Levant:**
- (b) **Syrian Cotton Trade: 2nd most important**
- - from 12th century, Lombardy (N Italy) became European leader in producing fustian textiles (Egyptian origin): from domestic flax (linen warps) and Levantine cotton (wefts)
- - from ca. 1300: slow, irredeemable decline
- - **1370s: warfare disrupted Lombard trade & promoted growth of S. German fustians**, which became their major growth industry
- - **South Germans totally dependent on Venice** for supplying Syrian cotton: selling silver in return
- → **trade promoted growth of Syrian cotton plantations**

The Italians in Late-Medieval International Commerce: Venice 7

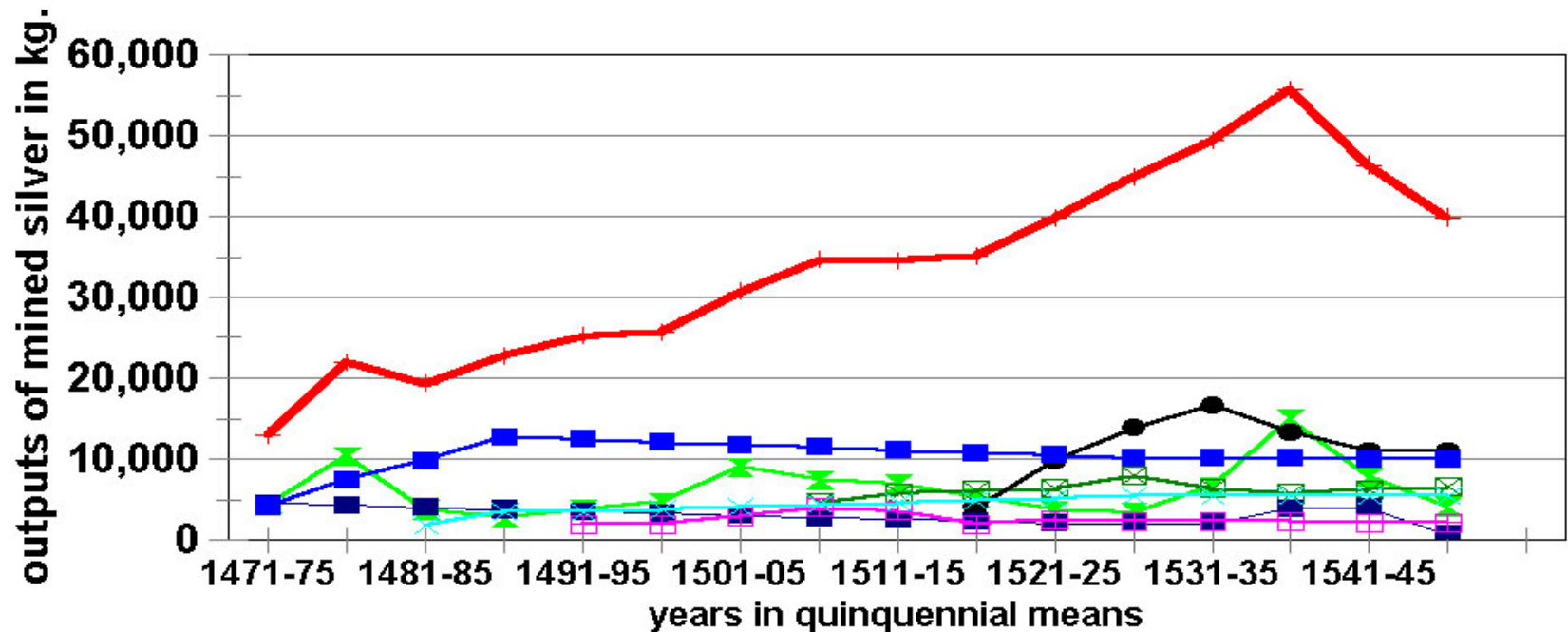
- (c) **Italian exports of western goods to the Levant**
- i) **Textiles: predominant industrial goods:** from Italy, Catalonia, Low Countries, England
- predominance of cheap textiles in 13th century gave way to **predominance of luxury woollens by mid 14th century**
- ii) **Other industrial goods:** glasswares, metal goods (including arms – if illegal), especially copper and brasswares, paper, soaps,
- iii) **foodstuffs:** grains, olive oil, salt, fish, dried fruits

The Italians in Late-Medieval International Commerce: Venice 8

- (d) **Venetian balance of trade with the Levant:**
- - 1490s: according to Eliyahu Ashtor (Israeli)
- - **in purchasing spices, cottons, and other Asian goods in Alexandria and Beirut, Venetians effected payment:** for one third by sale of western goods and two thirds in bullion, chiefly silver (but some gold);
- - i.e. Italians & Catalans not sell enough western goods (in value) to cover costs of their Levantine-Asian purchases
- (e) **Importance of South German silver mining boom from 1460s:** expanded supplies of silver and copper that Venetians used in their Levant trade (at least to the 1490s)
- **→ when silver flows had shifted more and more to Antwerp and the Brabant Fairs (next day)**

German-Central European Silver Mining

silver outputs in kg: 1471/5 - 1546/50



—x— Saxony

—x— Thuringia

—●— Bohmia: Joachimsthal

—x— Slovakia: Fuggers

—x— Hungary

—■— Tyrol: Schwaz

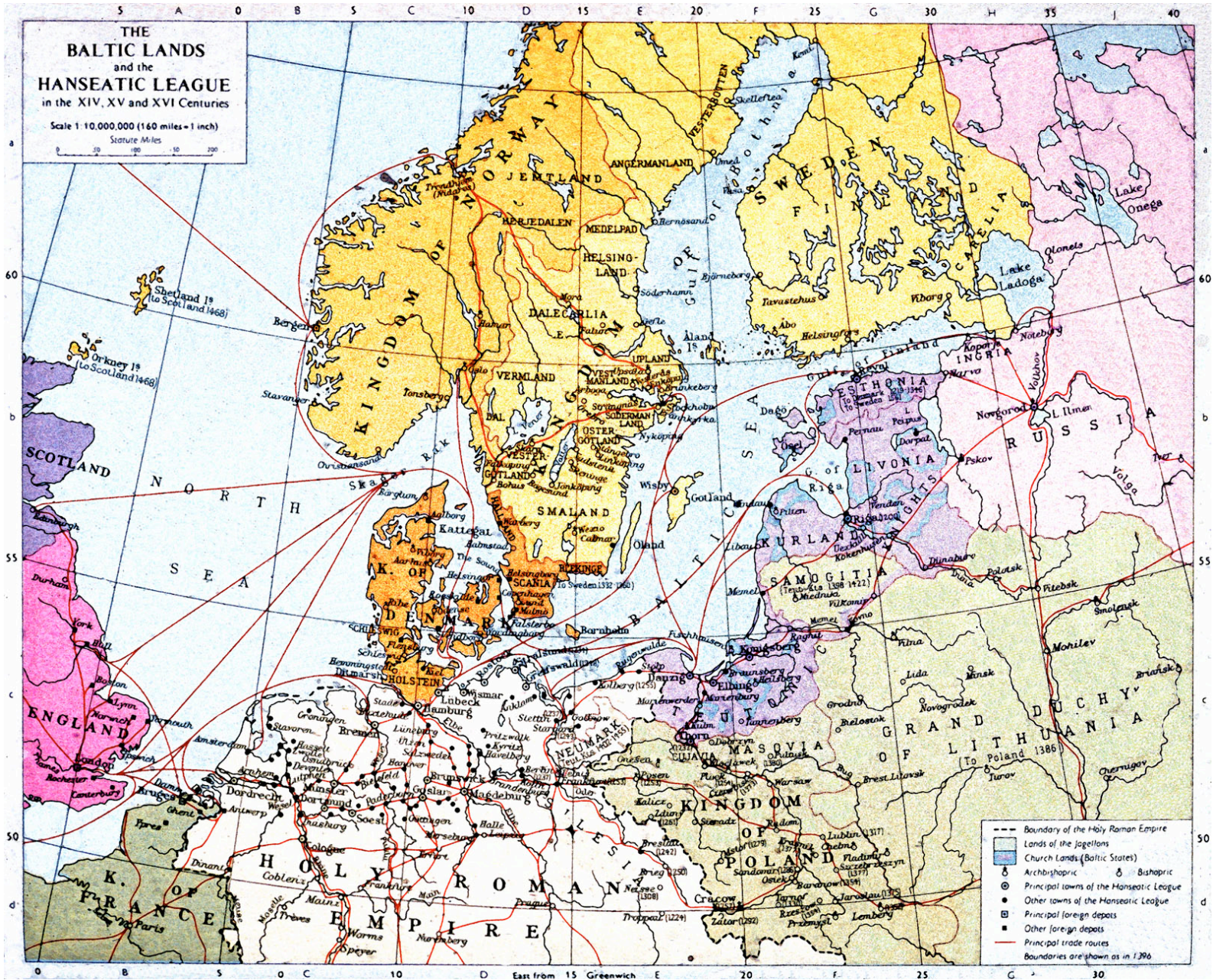
—+— Total Silver Outputs in kg (est)

**Estimates of Venice's 'Balance of Payments Deficit' with the Levant in the 1490s
(according to Eliyahu Ashtor)**

| Aspects of the Levant Trade | Total Value of Imports from the Levant as valued in Venetian ducats | Total Value of Merchandise Exports to the Levant as Valued in Venetian ducats | Total Value of Precious Metal Exports to the Levant (coin & bullion) in Venetian ducats | Percentage of the trade conducted in precious metals |
|---|--|--|--|---|
| Galley Trade with Alexandria and Beirut: minimum | 450,000 | 150,000 | 300,000 | 66.67% |
| Galley Trade with Alexandria and Beirut: maximum | 550,000 | 190,000 | 360,000 | 65.45% |
| Cog Trade in Syrian Cotton: minimum | 130,000 | 67,500 | 62,500 | 48.08% |
| Cog Trade in Syrian Cotton: maximum | 180,000 | 83,750 | 96,250 | 53.47% |
| Total Trade with Levant: minimum | 580,000 | 217,500 | 362,500 | 62.50% |
| Total Trade with Levant: maximum | 730,000 | 273,750 | 456,250 | 62.50% |
| Estimated Mean Values of Levant Trade | 655,000 | 245,625 | 409,375 | 62.50% |

D. Northern Commerce: the Baltic, German Hanse, and the Dutch

- - 1) **Importance of the Baltic zone:**
- - a) **chief areas for commerce:** Scandinavia (Norway, Denmark, Sweden), Germany, Poland, Lithuania and Courland (Latvia, Estonia), and Russia
- -b) **For both the Germans (Hanseatic League) and their Dutch rivals: the keystone of northern commercial power:**



Northern Commerce: the Baltic and the German Hanse 2

- 2) **Comparisons with Mediterranean trade and Italians:**
 - - a) **Similarities: northern counterpart of the Mediterranean**
 - - (i) **initial importance of luxury goods:** especially furs, amber
 - - but never as important as spices and silks in the Mediterranean,
 - - relative importance waned by later 15th century
 - (ii) **predominant role of textile exports to Baltic markets**
 - (iii) **chronic deficit in western Europe's balance of payments with the Baltic:** i.e., western purchases of Baltic goods usually exceeded value of western sales in Baltic markets
 - - b) **key difference:** much greater, increasing role of bulk goods in Baltic trades

Northern Commerce: the Baltic and the German Hanse 3

- (3) **The key export commodities of Baltic commerce:**
- - chiefly low-cost bulk goods: as raw materials and foodstuffs
- a) **forest products:**
- -i) **lumber and naval spars:** shipping
- - from eastern Germany (Prussia), Poland, Scandinavia
- b) **potash: potassium carbonate** (K_2CO_3)
- - either mined deposits, or from burnt trees
- - uses: textile dyeing (with woad), fertilizer, making glass & soap; later: saltpetre in gunpowder

Northern Commerce: the Baltic and the German Hanse 4

- **Chief Export Commodities from the Baltic:**
- c) **naval stores: for shipbuilding:** flax (canvas sails), hemp (rope: ship rigging), pitch (calking ships): especially from eastern Baltic (Livonia)
- d) **metal ores: both iron and copper-** from Sweden
- c) **grains: most important exports**
 - chiefly **rye and barley:**
 - **from Prussia and Poland, eastern Baltic**

Northern Commerce: the Baltic and the German Hanse 5

- **Chief Export Commodities from the Baltic:**
- (c) **Other Foodstuffs:**
- i) **beer:** from barley; later with hops added
- - from Hamburg principally
- - universal drink in northern Europe (as was wine in the south):
- **because both water & milk were so unsafe to drink**
- - beer underwent both boiling (mashed malt) and fermentation (with yeast & hops)
- **bacterial transmission of disease:** discovery of Koch, Pasteur (as noted in earlier lecture) in 1880s

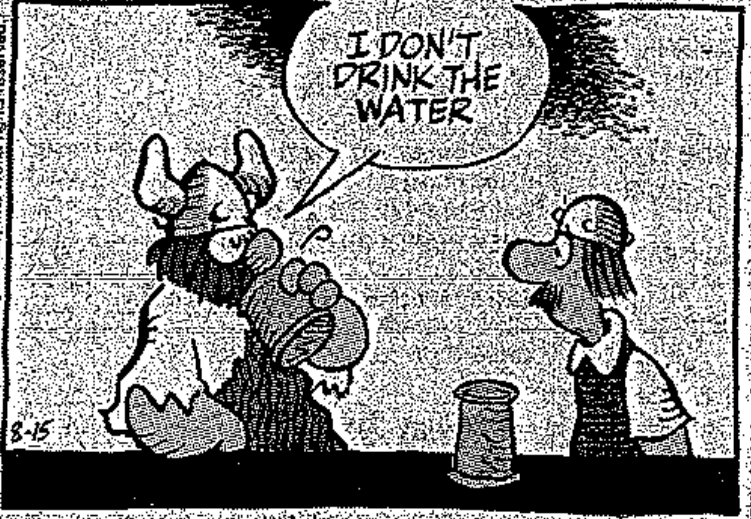
Hagar the Horrible

I'VE INVADDED MANY COUNTRIES IN MY CAREER...

AND I'M PROUD TO SAY I'VE NEVER ONCE BEEN SICK!

WHAT DO YOU ATTRIBUTE THAT TO, HAGAR?

CHRIS BROWN



©2007 by King Features Syndicate, Inc. All rights reserved.

Per capita beer consumption: the Low Countries and Germany, 1370 -1650

| Town | Year | Annual: litres | Daily: litres |
|---------|------|----------------|---------------|
| Antwerp | 1418 | 210 | 0.575 |
| | 1526 | 369 | 1.011 |
| | 1531 | 369 | 1.011 |
| | 1567 | 295 | 0.808 |
| | 1568 | 346 | 0.948 |
| | 1612 | 259 | 0.710 |
| | 1618 | 420 | 1.150 |
| | | | |
| Leuven | 1372 | 277 | 0.759 |
| | 1434 | 210 | 0.575 |
| | 1472 | 271 | 0.742 |
| | 1500 | 275 | 0.753 |

Per capita beer consumption: Low Countries and Germany, 1370 -1650

| Town | Year | Annual: litres | Daily: litres |
|----------|------|----------------|---------------|
| Leuven | 1524 | 273 | 0.750 |
| | 1574 | 273 | 0.748 |
| | 1601 | 285 | 0.780 |
| | 1650 | 350 | 0.960 |
| | | | |
| Mechelen | 1540 | 325 | 0.890 |
| | 1582 | 307 | 0.840 |
| | 1600 | 405 | 1.110 |
| | 1639 | 277 | 0.760 |
| | | | |

Per capita beer consumption: the Low Countries and Germany, 1370 -1650

| Town | Year | Litres: Annual | Litres: Daily |
|------------------|------|----------------|---------------|
| 's-Hertogenbosch | 1500 | 248 | 0.680 |
| | 1530 | 274 | 0.750 |
| | 1560 | 270 | 0.740 |
| | 1590 | 164 | 0.450 |
| | 1620 | 248 | 0.680 |
| | 1650 | 212 | 0.580 |
| | | | |
| Bruges | 1544 | 263 | 0.720 |
| | 1550 | 263 | 0.721 |
| | 1597 | 157 | 0.430 |
| | 1600 | 158 | 0.433 |

Per capita beer consumption: the Low Countries and Germany, 1370 -1650

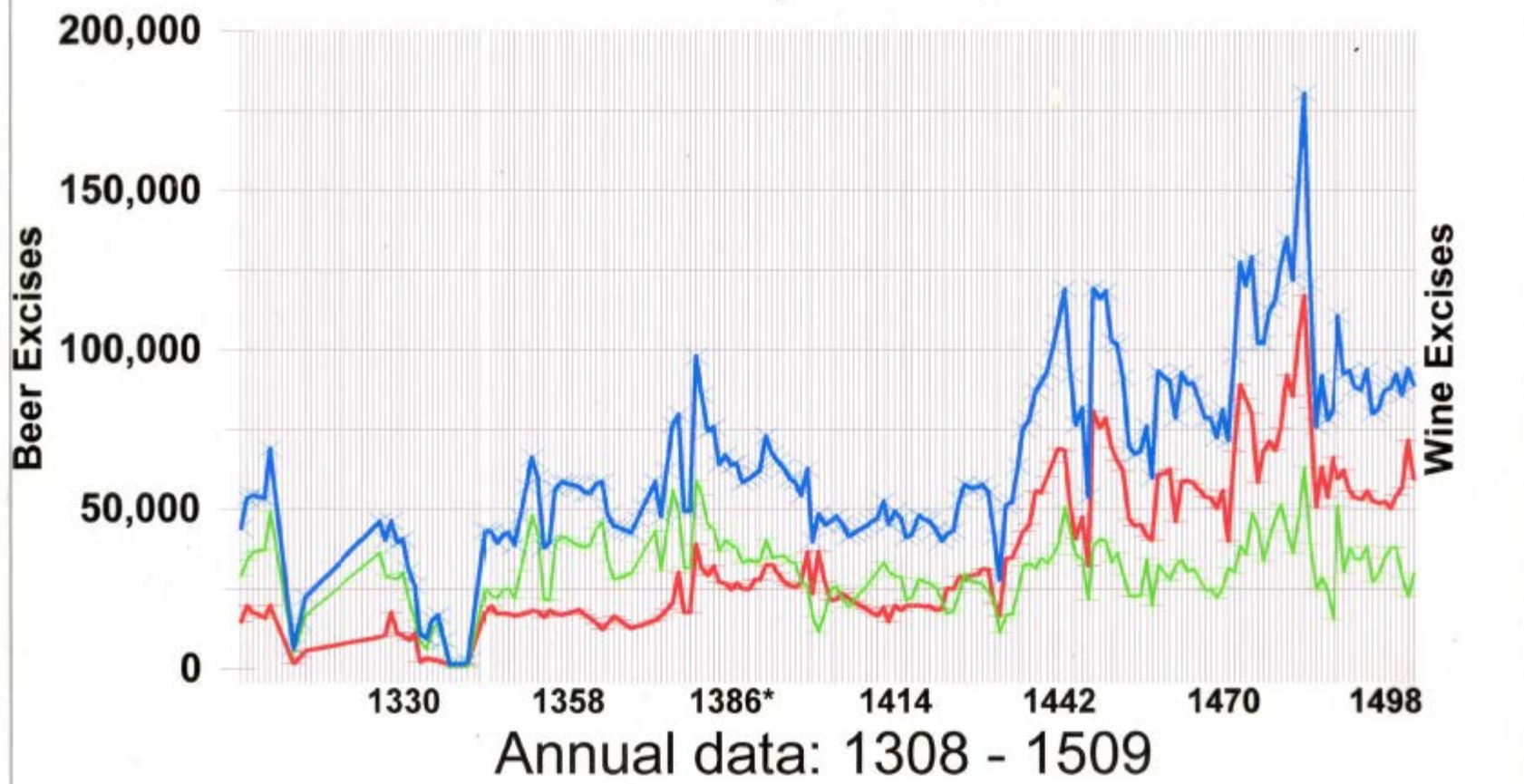
| Town | Year | Annual: litres | Daily: litres |
|---------|------|----------------|---------------|
| Ghent | 1579 | 201 | 0.550 |
| | 1606 | 157 | 0.430 |
| | | | |
| Haarlem | 1475 | 250 | 0.685 |
| | 1514 | 158 | 0.433 |
| | 1590 | 300 | 0.822 |
| | | | |
| Leiden | 1514 | 228 | 0.625 |
| | 1543 | 269 | 0.737 |
| | 1571 | 267 | 0.732 |
| | 1621 | 301 | 0.825 |

Per capita beer consumption: the Low Countries and Germany, 1370 -1650

| Town | Year | Annual: litres | Daily: litres |
|-----------|------|----------------|---------------|
| Hamburg | 1450 | 250 | 0.685 |
| | 1475 | 310 | 0.849 |
| | 1500 | 320 | 0.877 |
| | 1525 | 285 | 0.781 |
| | 1550 | 400 | 1.096 |
| | | | |
| Lübeck | 1550 | 400 | 1.096 |
| | | | |
| Nuremburg | 1551 | 300 | 0.822 |
| | | | |
| Mean | | 272 | 0.744 |

Bruges Beer & Wine Excises

Excises in livres parisis, 1308-1509



— Beer Excise

— Wine Excise

— Total Beer + Wine Excises

Northern Commerce: the Baltic and the German Hanse 6

- (c) **Other Foodstuffs:**
- ii) **herring:** first from Swedish coasts (Scania), and then from the North Sea [separate topic]
- iii) **salt:**
- - **originally mined rock-salt from salt-flats of Lüneburg**, near and controlled by Lübeck
- - **with increasing depletion ca. 1400, Germans sought sea-salt from France:** Bay of Biscay (Bourgneuf: SW, near Bordeaux)
- - **the universal preservative for meat, fish**
- - especially important in curing herring



Northern Commerce: the Baltic and the German Hanse 7

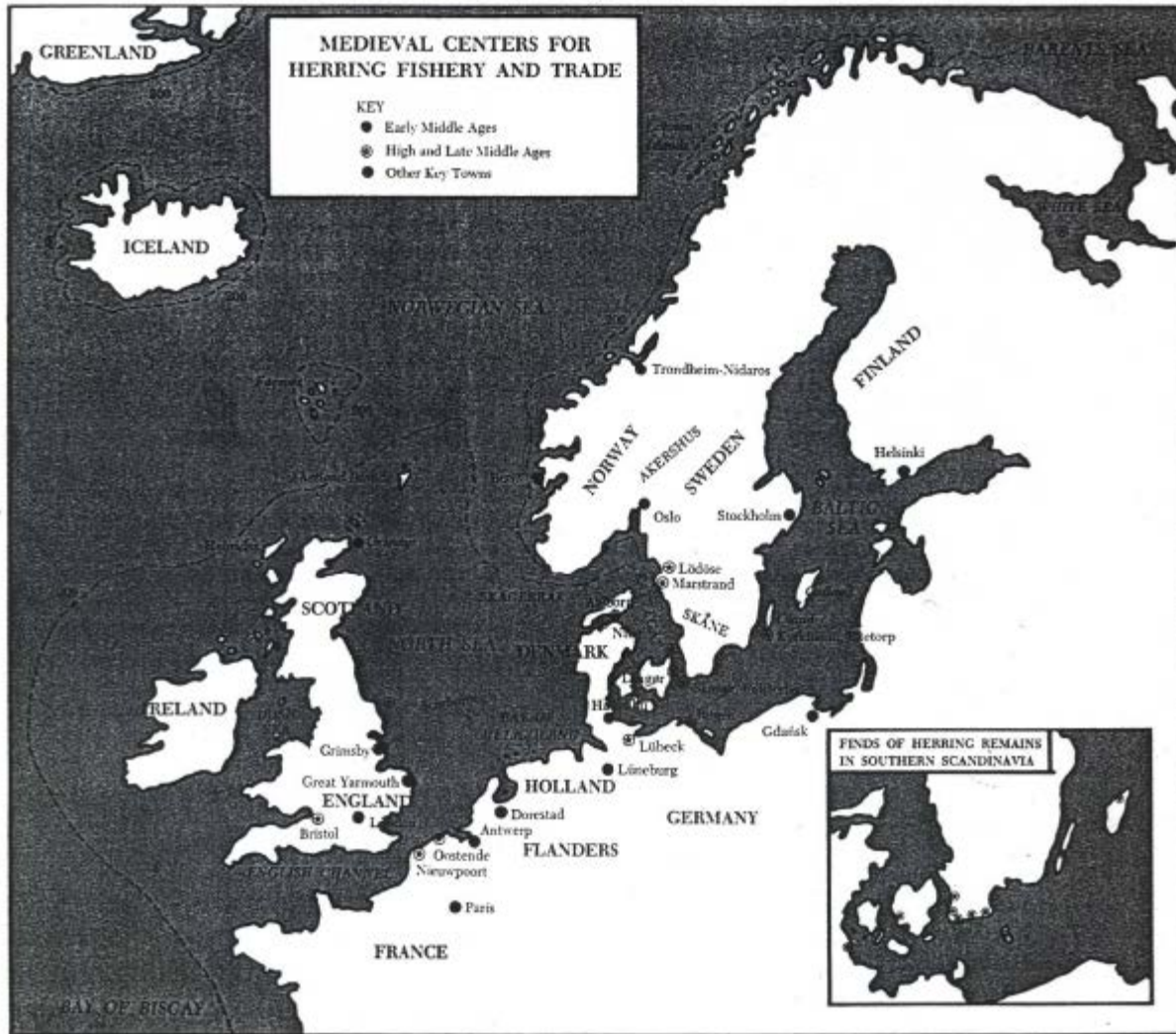
- d) **Herring Fisheries: their vital importance**
- -i) **abundant, highly nutritious, and relatively cheap foodstuff**
- - when other high-protein foods were costly
- - **Richard Unger: challenged view that it was cheap:**
- but ca. 1500, Antwerp mason could buy 50 herrings with his daily (summer) wage: fresh, smoked herrings

Northern Commerce: the Baltic and the German Hanse 8

- d) **Herring Fisheries: their vital importance, cont'd**
- -ii) **fish easily preserved ('cured') and stored:**
 - - by salting & or pickling, or by smoke-drying
 - - stored, transported long distances to European markets
- iii) **important for its oil:** lubricants
- iv) **importance:** Dutch sold 200 million herring a year, ca. 1650, while controlling only half the European markets.

Herrings





Northern Commerce: the Baltic and the German Hanse 9

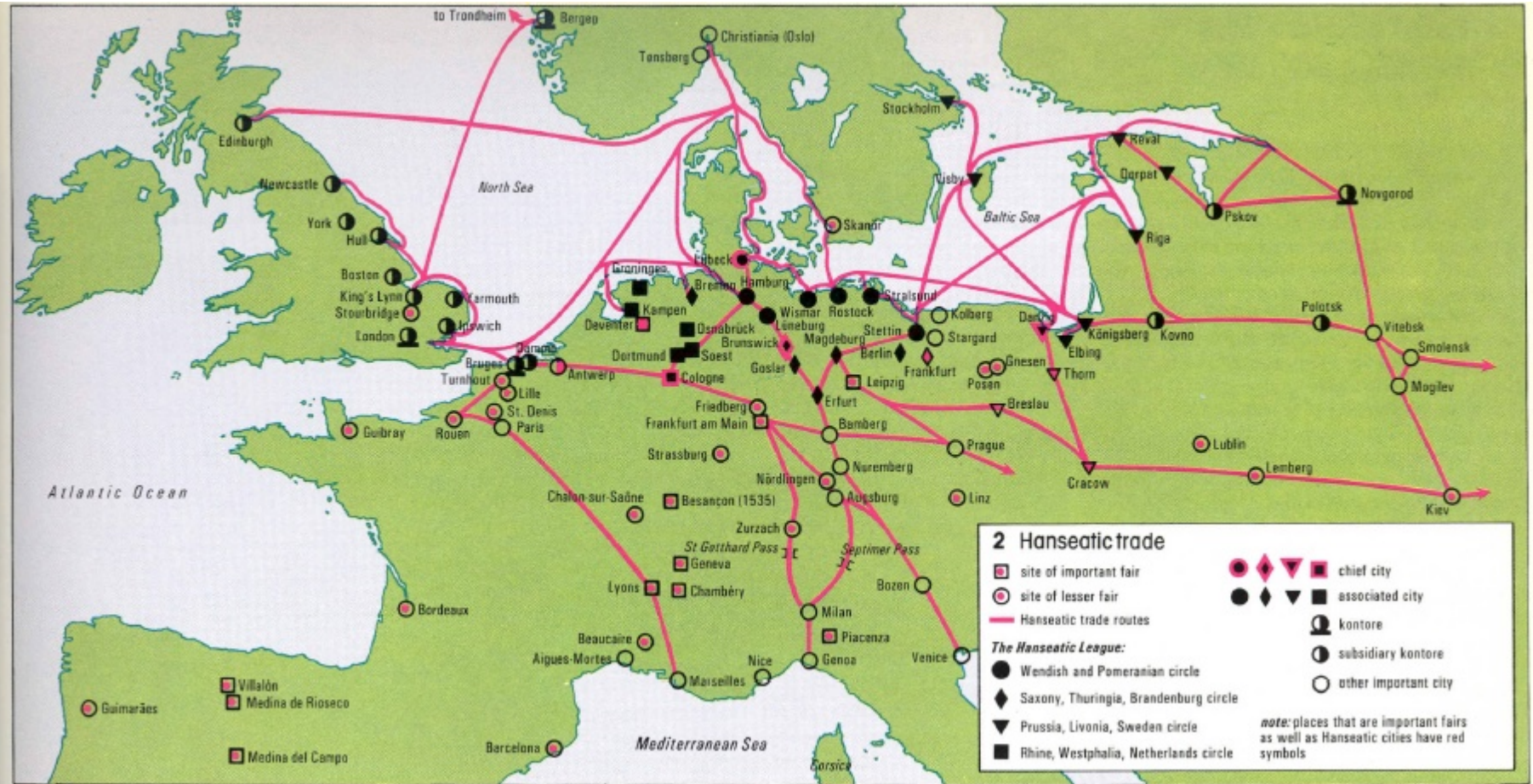
- (3) **Commodities imported into Baltic zone:**
- a) **chiefly woollens:** from both Low Countries (Holland, Brabant, Flanders) & England
- b) **others: spices, wines, metalwares, etc.**
- c) **Note historical anomaly:**
- - **beer, herring, and salt:** originally major exports became major imports by 15th century
- - **part of story lies in rise of Dutch commerce**

Northern Commerce: the Baltic and the German Hanse 10

- (4) **The Hanseatic League and Lübeck:**
- a) **creation of the League:**
- **1356 to 1370:** from conflicts with both Flanders and Denmark
- **Treaty of Stralsund 1370:** victory over Denmark, giving Hanse control over herring fisheries in Scania: in Danish ruled Sweden
- **Lübeck acknowledged leader** of the League

Northern Commerce: the Baltic and the German Hanse 11

- b) **Hanseatic League: union of four regional town leagues:**
 - i) **Wendish League**, in western Baltic: led by Lübeck, in alliance with Hamburg (Elbe) and Bremen (North Sea)
 - ii) **Livonian League**: led by Riga (eastern Baltic: modern Latvia)
 - iii) **Prussian League**: dominated by Danzig and the Teutonic Order (in Poland and Prussia)
 - iv) **Rhenish League**: Rhineland towns led by Cologne (Köln)

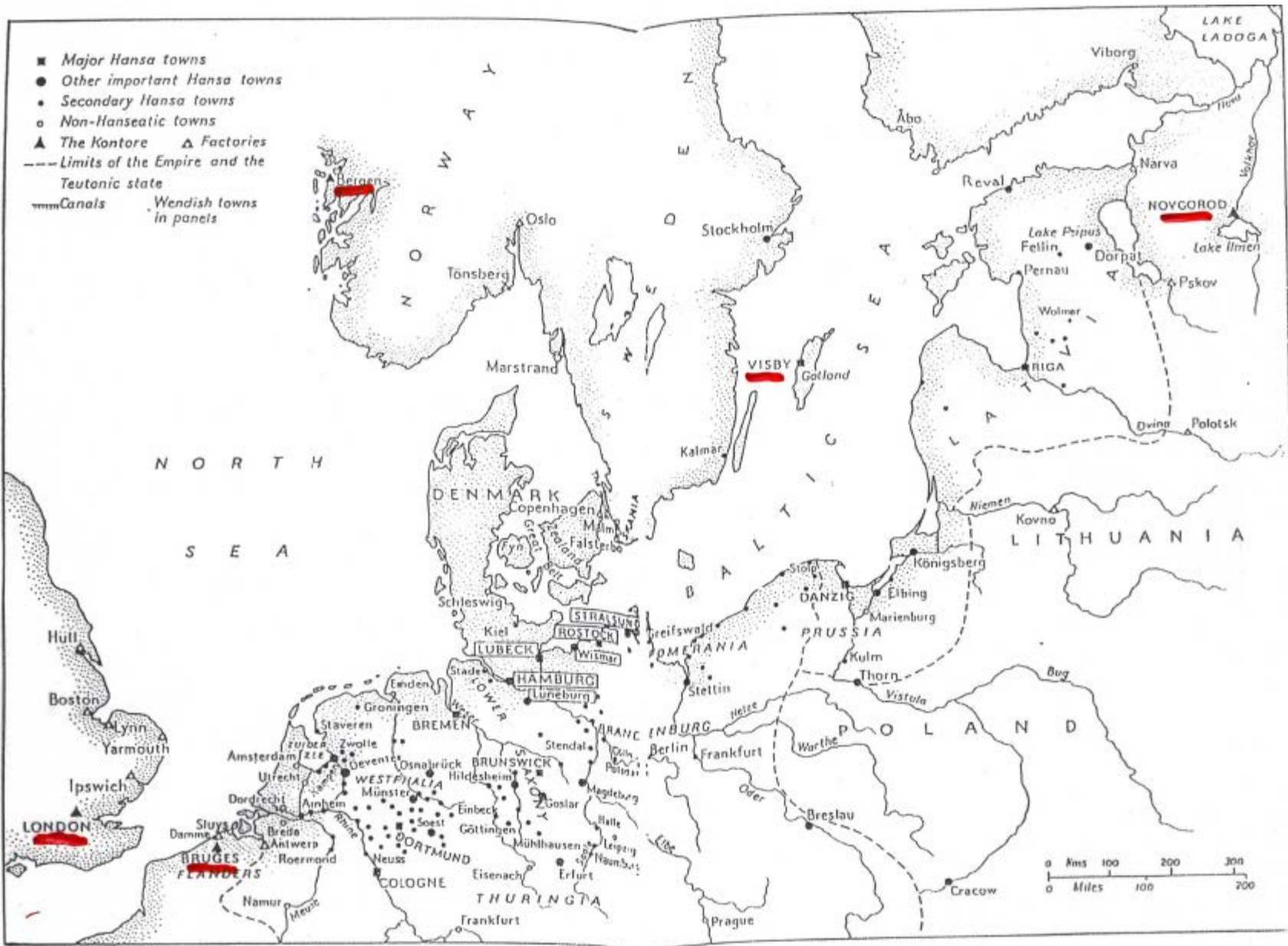


Northern Commerce: the Baltic and the German Hanse 12

- c) **The Hanseatic Kontors (trade factories)**
- - the following trading settlements were jointly run by the League
- (1) **Bruges**: in Flanders: most important, by far
- (2) **London**: the Steelyard (Stahlhof)
- (3) **Bergen**: in Norway (Scandinavian trade)
- (4) **Novgorod**: Peterhof: for Russian trade
- (5) **Visby**: Swedish island of Gotland (lumber, metals)

Northern Commerce: the Baltic and the German Hanse 13

- d) **Hanseatic League just a loose confederation:**
 - - **Had a federal Diet or parliament & treasury**
 - - but no central administration
 - - **no federal navy or organized armed forces:**
 - - individual town levies for military services
 - - **problems:** disunity with conflicting interests and lack of organized power



Northern Commerce: the Baltic and the German Hanse 14

- (e) Lübeck as leader of the Hanseatic League
- - i) based on its dual control over:
- - commerce in both salt and herrings
- - the transit route from the Baltic to North Sea- originally by sea, around Denmark
- - **Strecknitz canal (1397)** linking Lübeck and Hamburg on the Elbe estuary: below Denmark

Northern Commerce: the Baltic and the German Hanse 15

- ii) **external threats to Lübeck's dominance**
- - rise of Dutch and then English competition from 1390s:
- - as both established a direct sea route from the North Sea, via Danish Sund, into Baltic
- iii) **dual invasion came at the very wrong time:** -
- when Hanseatic markets were seriously contracting
- Poland was challenging Prussian control over north-eastern Slavic Europe
- - hence these threats intensified Hanseatic monopolism
- iv) **internal threat's to Lübeck's dominance:** from those towns that welcomed trade with Dutch: in the Livonian, Prussian, and Rhenish Leagues

Northern Commerce: the Baltic, the Dutch and the Hanse 1

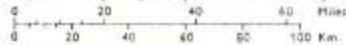
- (1) **The Dutch victory over German Hanseatic League in the 15th century: a major historical turning point**
- 2) **Rise of the Dutch towns:**
- a) **agrarian factors**
- -i) **virtual absence of feudalism, manorialism, serfdom:**
only 12 feudal families
- - **42% of peasants owned own lands**, while rest were quit-rent free peasants: no communal farming
- -ii) **land reclamation and settlement by free peasants-**
- even so, much of Holland remained a network of islands, peninsulas, inland waterways connected only by shipping

Northern Commerce: the Baltic, the Dutch and the Hanse 2

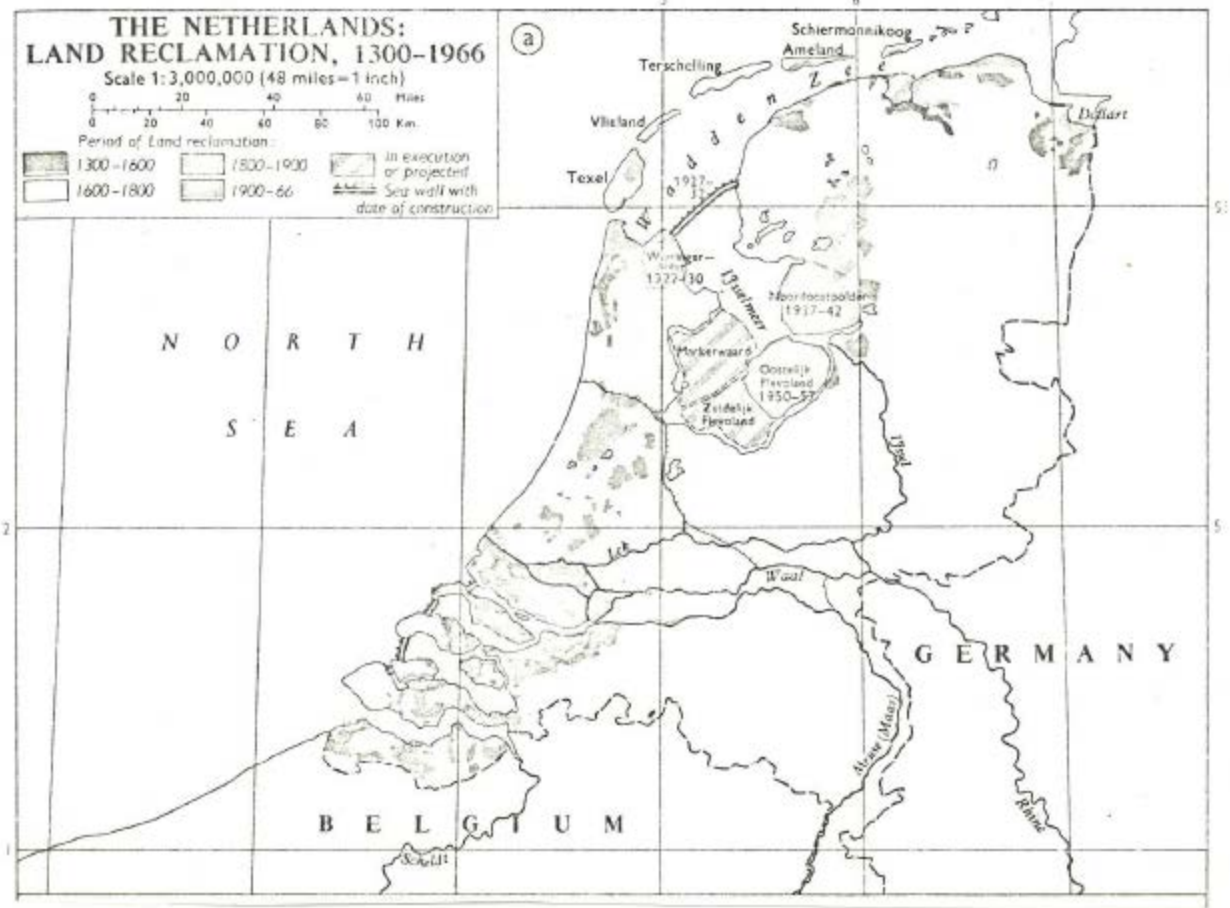
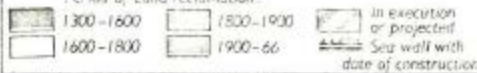
- -iii) **livestock foundations of agrarian society:** since reclaimed lands chiefly used for pasture for livestock raising (cattle)
- - **Jan de Vries:** argues that livestock-based agrarian societies better able to resist feudal encroachments than are arable societies
- - **livestock as a medium of exchange** (pecunia – based on pecus)
- - **livestock societies depended on other economic activities:** fed by fishing, trade

**THE NETHERLANDS:
LAND RECLAMATION, 1300-1966**

Scale 1:3,000,000 (48 miles=1 inch)



Period of Land reclamation:

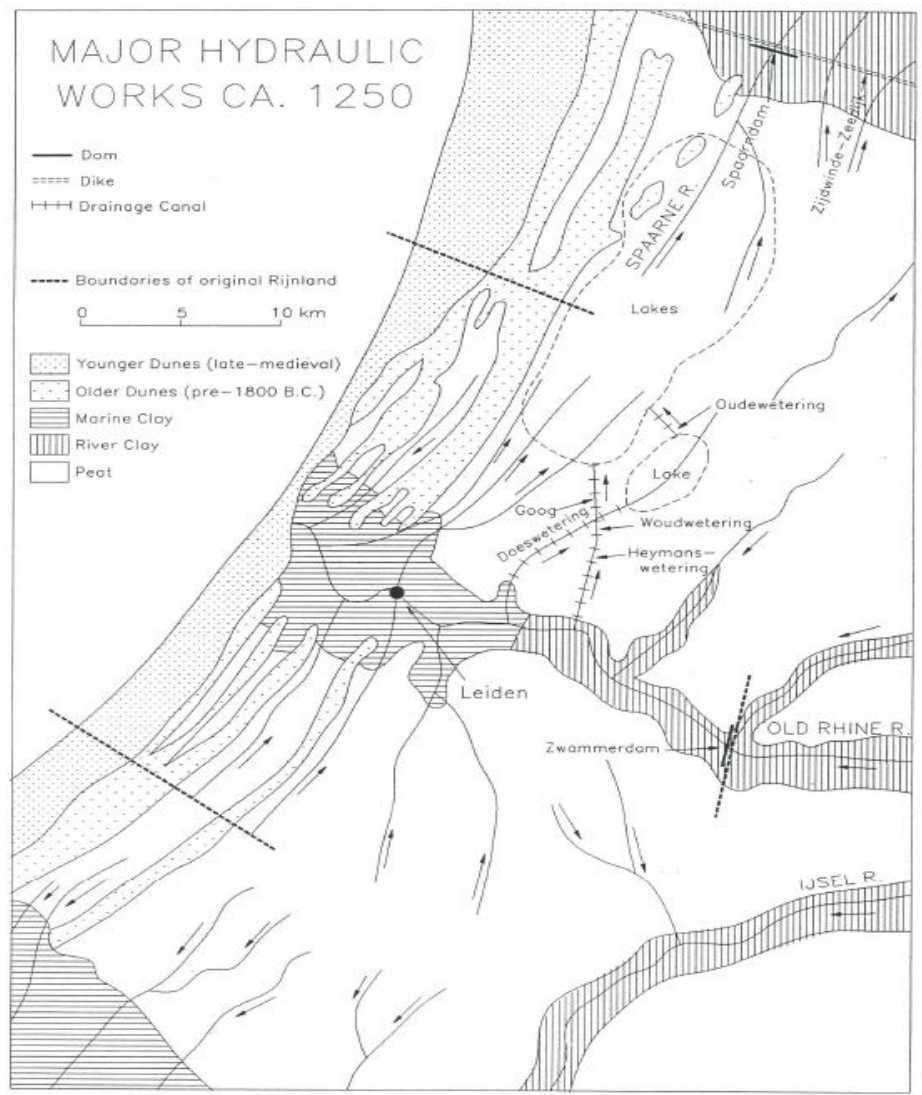


MAJOR HYDRAULIC WORKS CA. 1250

- Dam
- ==== Dike
- +++ Drainage Canal

--- Boundaries of original Rijnland
 0 5 10 km

- Younger Dunes (late-medieval)
- Older Dunes (pre-1800 B.C.)
- Marine Clay
- River Clay
- Peat



Northern Commerce: the Baltic, the Dutch and the Hanse 3

- a) **agrarian factors in rise of the Dutch: continued**
- iv) **Highly advanced agriculture**: earlier online lecture
- - **much higher productivity** per unit of land and manpower:
- - **liberated labour, land, and resources** to be more productively employed in urban based commerce, fishing, shipping
- - **Urbanization**: 45% by 1450s; and 54% by 1520s
- - → **Dutch towns became dependent on imported grains and fishing** to feed its urban populations
- -v) **population densities led to land scarcity → high prices → investment in commerce**, industry, finance, fishing, rather than in landed estates (few, scarce supply)

Northern Commerce: the Baltic, the Dutch and the Hanse 4

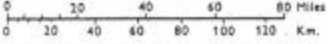
- b) **Rise of the Dutch: Political Factors**
- i) **Holland & Zealand: counties of the Germanic Habsburg Empire** (Holy Roman Empire): but no such imperial authority was imposed on them
 - - local counts were generally weak
- ii) **Dutch civil war of the 1420s**
- **after last count (William of Bavaria) had died without a male heir: disputed succession,**
- **claimed by his daughter: Countess Jacqueline of Bavaria, who married the English duke of Gloucester, who invaded Holland with English army**

Northern Commerce: the Baltic, the Dutch and the Hanse 5

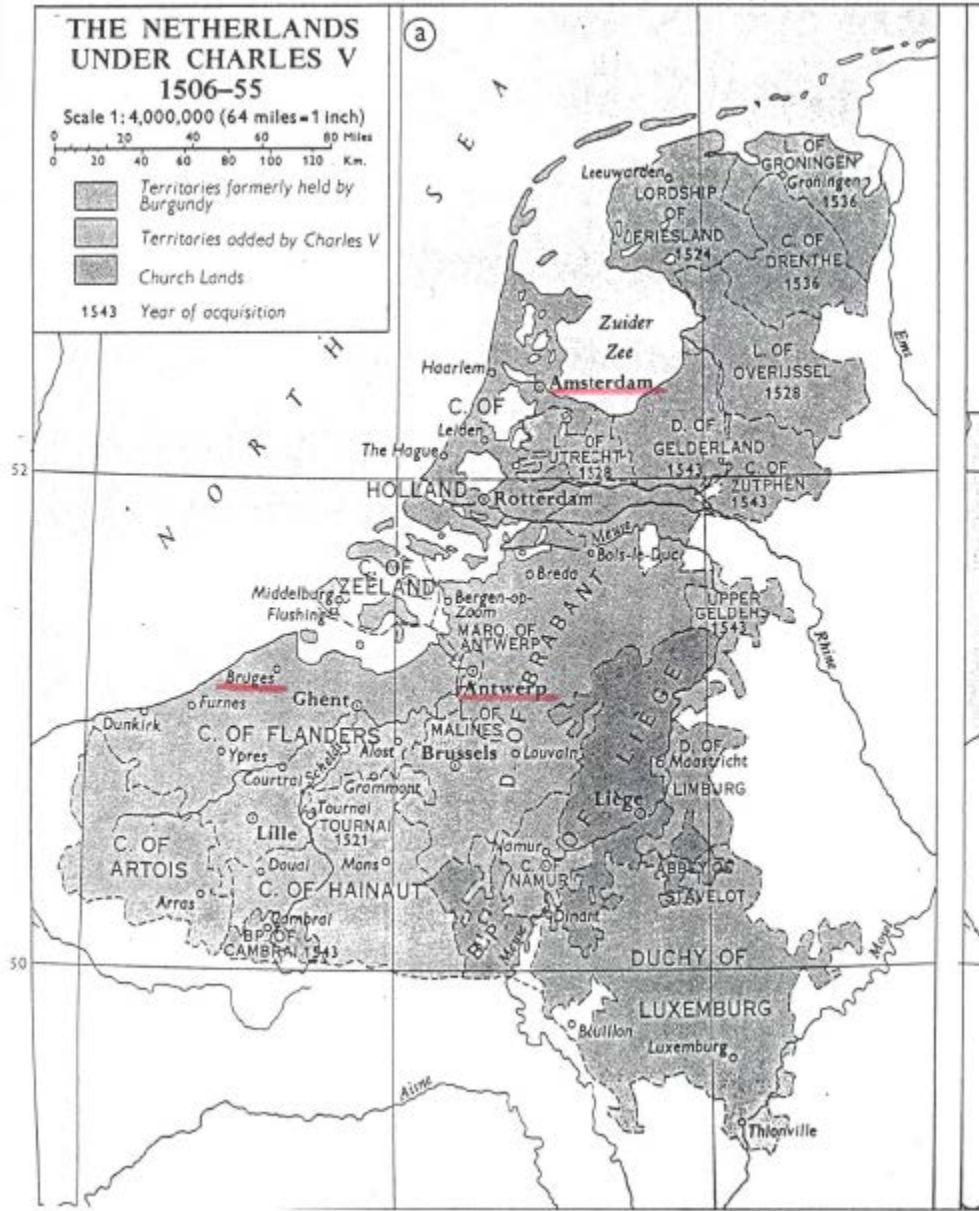
- ii) **Dutch civil war of the 1420s: cont'd**
- - **Kabiljauws vs. Hoeks:** merchants & towns against Jacqueline and a small aristocracy
- - **Philip the Good: duke of Burgundy & Count of Flanders:** intervened to support the towns (Kabiljauws) with military force, in return for recognizing him as the new (titular) count
- - **Victory of Philip and Kabiljauws: Treaty of Delft (1428):** allowed the towns (Estates) to gain effective governance over these two counties:
- **17 members for towns of Holland & only 1 for the nobles:** only northern parliament fully dominated by merchants

THE NETHERLANDS UNDER CHARLES V 1506-55

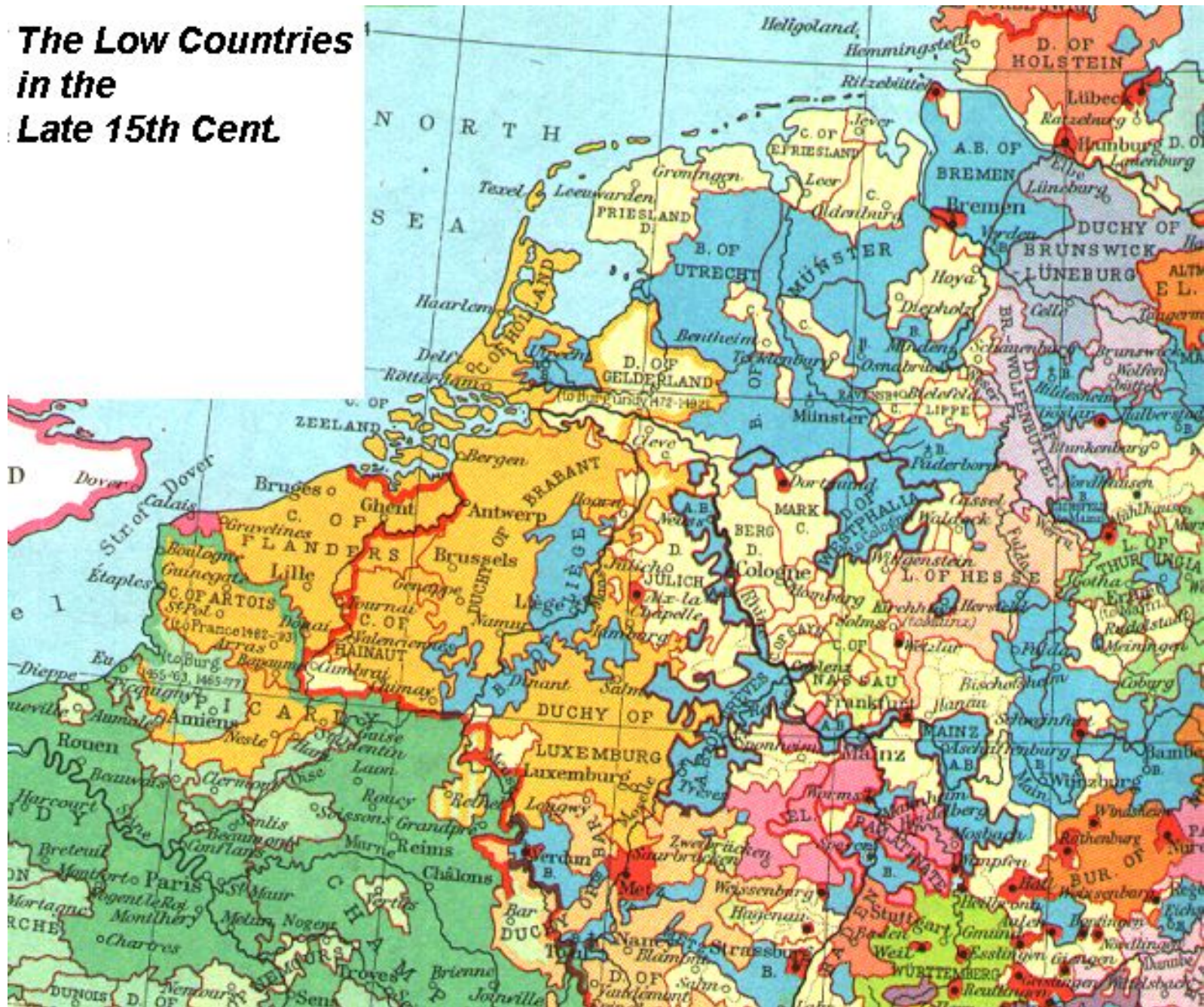
Scale 1: 4,000,000 (64 miles = 1 inch)



- Territories formerly held by Burgundy
- Territories added by Charles V
- Church Lands
- 1543 Year of acquisition








**The Low Countries
in the
Late 15th Cent**





DOMINIONS OF THE HABSBOURG

-  Spanish branch
-  Austrian branch
-  Boundary of the Holy Roman Empire, about 1526
- POSSESSIONS OF THE BOURBONS
-  Hereditary lands of Henry of Navarre
-  Lands of Charles of Bourbon-Montpensier



10° Longitude A West of B Greenwich B 0° C Longitude 5° East of D Greenwich 10° E 15° F 20° G 25° H 30° J

Northern Commerce: the Baltic, the Dutch and the Hanse 6

- c) **Rise of the Dutch: geographic factors**
- i) **Low Countries lay on estuaries of three major rivers: the Scheldt (Escaut), the Maas (Meuse), and the Rhine (Rijn)**
 - - provided access to France, Germany, Central Europe
- ii) **Low Countries (with Holland) also lay on the North Sea: as highway from Baltic to England and all western Europe (France, Spain, Portugal)**
- iii) **That geography in part allowed the Low Countries to dominate the commerce of northern Europe from the 12th to late 18th centuries: from Bruges → Antwerp → Amsterdam, but then → London**

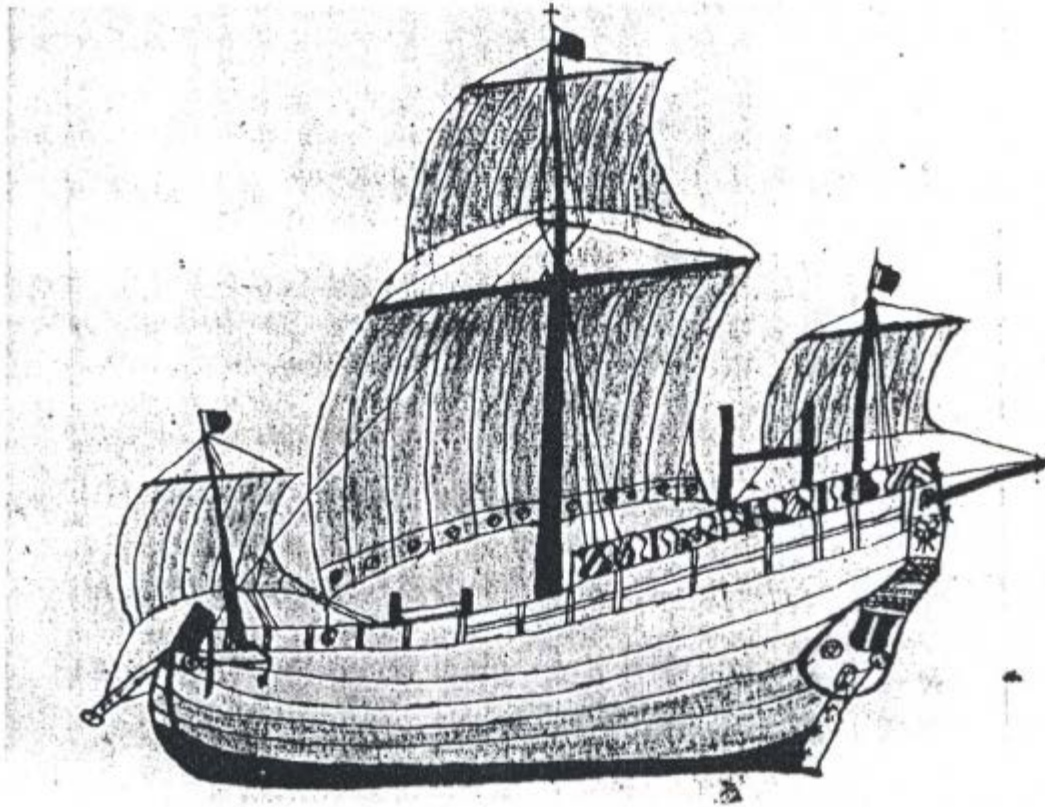
Northern Commerce: the Baltic, the Dutch and the Hanse 7

- (3) **Dutch Mastery over the Herring Trades:**
- a) **Dutch had long participated in the Baltic herring fisheries**, while also engaging in local herring fisheries in North Sea
- b) **Technological advances in herring fisheries in the Low Countries (Flanders & Holland)**
- i) **The Buis (buizen): or 'bus'**
- - cheaply built, flat-bottomed fishing and cargo board, three sails: about 140 tonnes: - designed for deep-sea fishing for a week or more

Northern Commerce: the Baltic, the Dutch and the Hanse 8

- ii) **More advanced herring nets:** strung between several buizen
- iii) **Innovations in salt-curing:** for large scale herring catches on board
- **rapid, large-scale, on-board gutting, salting,** when fish were at their freshest (rather than onshore): by early 15th century (Flemish?)
- - **accidental quality improvement:** stomach appendices (pyloric caecae) left inside the fish: its chemical (trypsin) sped up curing process: freshness

Dutch Herring Buss, Sixteenth Century



Northern Commerce: the Baltic, the Dutch and the Hanse 9

- (3) **Dutch Mastery over the Herring Trades:**
- (c) **Shift of herring spawning grounds:** from the Baltic (Scania) to the North Sea: 1420s
- i) **herring spawning grounds in Scania** virtually disappeared by the late 1420s
- - **most of the herring were now spawning in the North Sea**, between England and Holland (in fact: closer to English shores).

Northern Commerce: the Baltic, the Dutch and the Hanse 10

- ii) **Theories to explain shift of spawning grounds**
- (1) **traditional theory: that Baltic became less saline** (salty) because of melting glaciers:
- **argument based on the fact that herring feed on plankton**, which requires certain minimum levels of salinity
- but absolutely no evidence for this – and how could that happen so quickly?
- (2) **better theory: rapid depletion of the Scania herring grounds** by Hanse overfishing: in response to rising Flemish-Dutch competition

Northern Commerce: the Baltic, the Dutch and the Hanse 11

- (d) **Dutch mastery of herring industry: Atlantic salt trade**
- - depletion of Lüneburg salt mines led Hanse to seek sea-salt in Bay of Biscay (SW coast of France)
- - Bay of Biscay much closer to Holland than to Lübeck: Dutch transport advantage

- (e) **Dutch advantages in herring trades: over the Germans**
- - lower cost fishing with Δ scale + superior technologies
- - quality advantages from trypsin in on board curing
- - much lower transport costs: for both salt & herrings
- - North Sea herring: greater salinity → more plankton → larger and fatter herrings

Northern Commerce: the Baltic, the Dutch and the Hanse 12

- (f) **Consequences of Dutch victory over the Hanse in the herring fisheries & trades**
- i) **major spur to shipbuilding** → increased demand for Baltic timber → increased Dutch trade in the Baltic
- ii) **marketing millions of herrings across Europe** → major spur to Dutch commercial expansion
- iii) **17th century statistics: Dutch herring trades**
- - employed 20% of Dutch adult population
- - fleets of over 500 buizen produced over 200 million herring annually
- - value of herring exports exceeded value of English woollen cloth exports ca. 1640

DUTCH HERRING TRADES

Lasts of Herrings Shipped from the Netherlands through the Danish Sund (Sound) into the Baltic, 1562 - 1780, in annual averages:

| Years | Lasts of Herring* | Years | Lasts of Herring* |
|--------------|--------------------------|--------------|--------------------------|
| 1562 - 69 | 2,619 | 1671 - 80 | 1,954 |
| 1574 - 79 | 456 | 1681 - 90 | 2,959 |
| 1580 - 89 | 852 | 1691 - 00 | 1,879 |
| 1590 - 99 | 5,044 | 1701 - 10 | 329 |
| 1600 - 09 | 8,495 | 1711 - 20 | 1,114 |
| 1610 - 19 | 8,658 | 1721 - 30 | 1,748 |
| 1620 - 29 | 7,593 | 1731 - 40 | 1,764 |
| 1630 - 39 | 7,512 | 1741 - 50 | 585 |
| 1640 - 49 | 8,089 | 1751 - 60 | 663 |
| 1650 - 57 | 3,383 | 1761 - 70 | 610 |
| 1661 - 70 | 2,607 | 1771 - 80 | 1,389 |

* last = 12 barrels of herrings. The Oxford English Dictionary states: that a last of 'red herrings and pilchards [contains] 10,000 to 13,200 fish'. If the Flemish barrel had contained 833 herrings (in the 15th century), a last would have amounted to about 10,000 herrings (9,996).

Northern Commerce: the Baltic, the Dutch and the Hanse 13

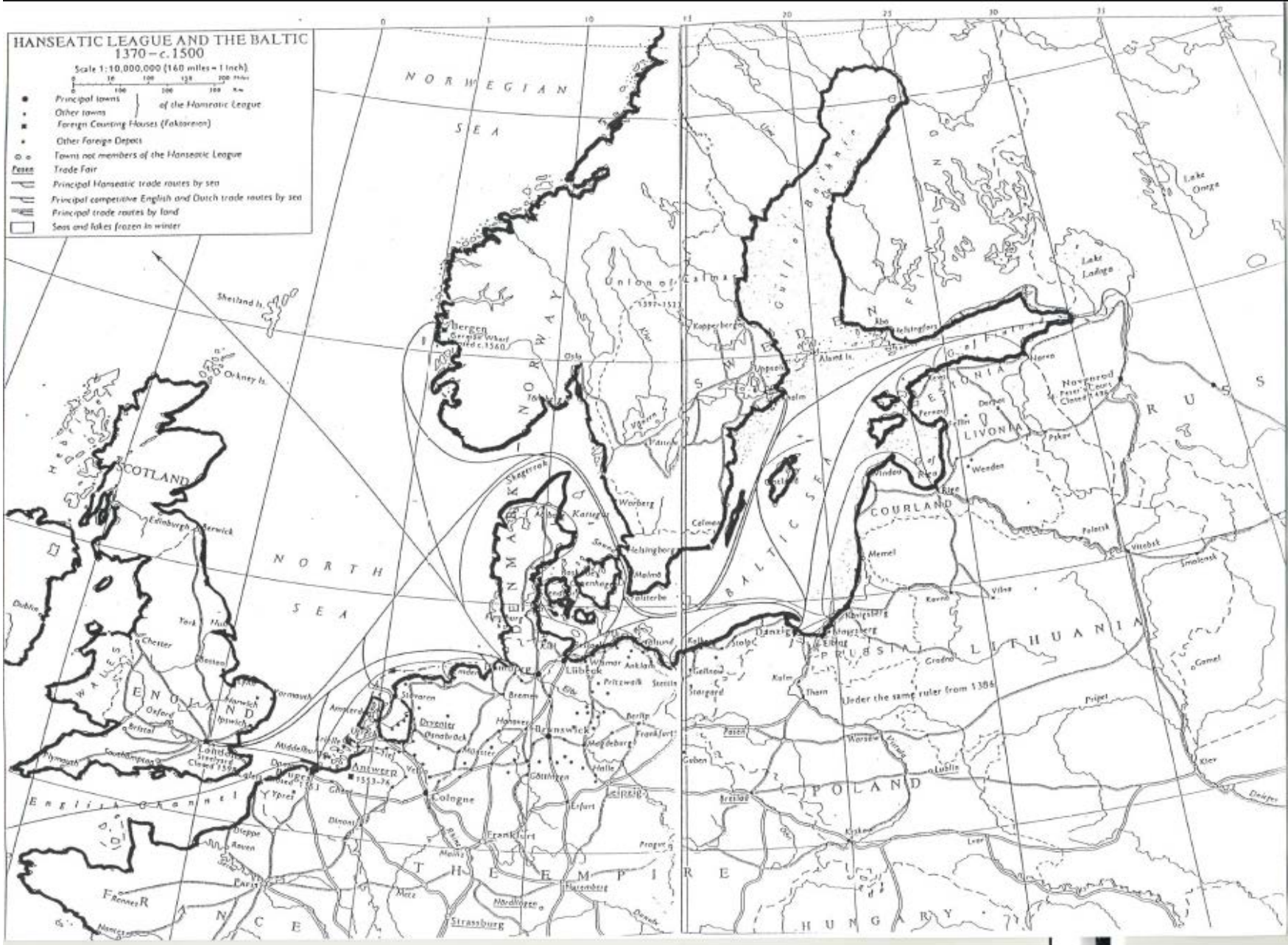
- (7) **Dutch Commercial Expansion into Baltic: from the 1390s**
- a) **Both the English and the Dutch began a direct-sea route invasion of the Baltic in the later 14th century:**
 - **around Denmark:** through the Skaggerak, Kattegat, and Danish Sund (Sound)
 - - **The English were first:** from the 1370s: to Danzig & Prussian towns
 - - **The Dutch followed them only in the 1390s,** with a far smaller presence

HANSEATIC LEAGUE AND THE BALTIC 1370 - c. 1500

Scale 1:10,000,000 (160 miles = 1 inch)



- Principal towns of the Hanseatic League
- Other towns
- Foreign Counting Houses (Faktoren)
- Other Foreign Depots
- Towns not members of the Hanseatic League
- Trade Fair
- Principal Hanseatic trade routes by sea
- Principal competitive English and Dutch trade routes by sea
- Principal trade routes by land
- Seas and lakes frozen in winter



Northern Commerce: the Baltic, the Dutch and the Hanse 14

- (7) **Dutch Commercial Expansion into Baltic: from the 1390s**
- b) **The Dutch had begun doing so as, in effect, subcontractors and commercial agents of the Wendish League (Lübeck)**
- - **from Hamburg, the Dutch had long handled trans-shipping from the Baltic (via Lübeck) to the Low Countries and northern France:**
- - **better able to navigate inland waterways through Holland-Zealand**

Northern Commerce: the Baltic, the Dutch and the Hanse 15

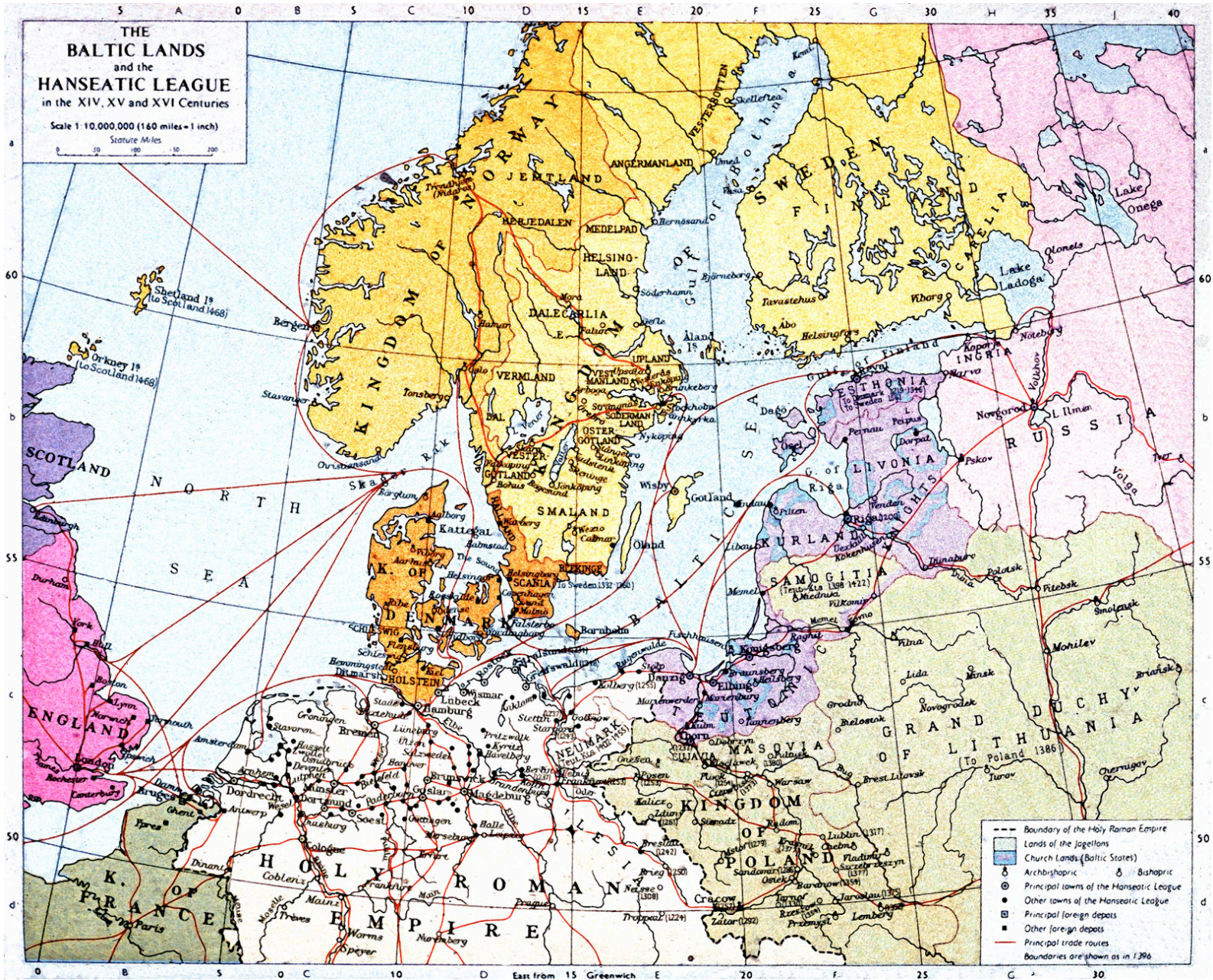
- c) **Initial Dutch imports into the Baltic:**
- **what the Hanse had previously exported:** herrings, salt, and beer; but also woollen textiles, wines
- d) **Dutch return cargoes: exports from the Baltic:**
- **lumber and naval stores above all, but also grains (rye, barley), and other Baltic goods .**

Northern Commerce: the Baltic, the Dutch and the Hanse 16

- (8) **The Wendish Hanseatic Reaction to this invasion:**
- a) **This dual invasion of the Baltic came, as noted earlier,** at the worst possible time for the Wendish League (Lübeck):
 - when their markets were seriously contracting
- b) **the Wendish Hanse's reaction was to be expected:**
 - hostile opposition and determination to monopolize their Baltic and North Sea trades
- c) **The Wendish towns made a crucial error:** they focused on the English threat & ignored the Dutch – until it was too late!

Northern Commerce: the Baltic, the Dutch and the Hanse 17

- d) **The English appeared to be the greater danger, because:**
 - - **Major military (especially naval) power** that had almost conquered France (Battle of Agincourt: 1415)
 - - **Were becoming the major, most important lower-cost producer of quality woollens** – with surging exports
 - - **The Hanse naively thought that the Dutch were allies & much weaker than the English**



Northern Commerce: the Baltic, the Dutch and the Hanse 18

- (9) **The Hanseatic Victory over the English in 15th century**
- a) **English Baltic trade had in fact reached its peak with the Prussian Treaty of 1407** : never in fact implemented, since Prussians refused reciprocal rights (to be seen next day)
- b) **1437: England's Vorrath Treaty with entire League:** was also never ratified: because the English pirates began attacking Wendish Bay Fleets (for salt)
- **thus combining Prussian and Wendish opposition to England**

Northern Commerce: the Baltic, the Dutch and the Hanse 19

- c) **1474: Treaty of Utrecht (Netherlands): an English humiliation:**
- **-confirmed all Hanseatic privileges in England -- superior to those of any other aliens—**
- **while denying any reciprocal rights to England in the Baltic: great disaster for English trade**
- **- meant the virtual exclusion of English shipping from the Baltic for over a century: until the 1570s (under Elizabeth I)**
- **- English also lost their commercial privileges in Scandinavia and Iceland (Danish possession)**

Northern Commerce: the Baltic, the Dutch and the Hanse 20

- (10) **The Dutch Victory over the Hanse:**
- a) **The Dutch towns struck in the 1420s:**
- in alliance with the Danes, fought several successful naval/corsairs wars against the Wendish Towns
- b) **1441: Treaty of Copenhagen: sponsored by Denmark**
- **-The Wendish Hanse, still fixated on their English foe, decided on a separate peace with the Dutch towns (Holland & Zealand)**
- **- Treaty award Dutch towns full freedom of trade in the entire Hanseatic trading zones**
- **- Wendish towns fully intended to crush the Dutch later – but later found the Dutch too strong to be defeated**

Northern Commerce: the Baltic, the Dutch and the Hanse 21

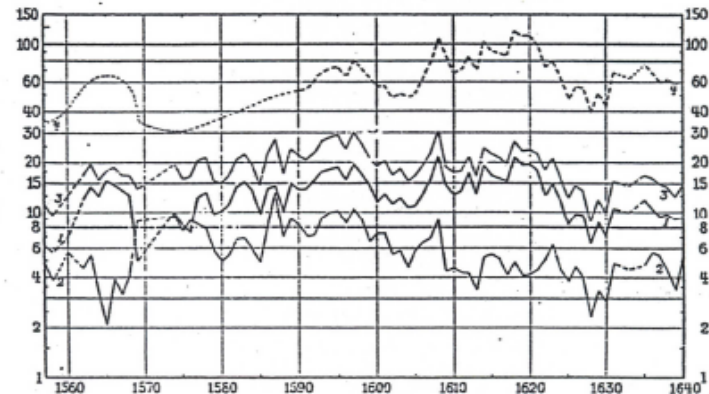
- c) **Problem: Hanseatic dissension (and greed)**
- - in eastern Baltic, the **Prussian & Livonian towns**, having once been hostile to the English, came to welcome Dutch trade
- - the Dutch offered much better commercial & credit terms than did the Wendish towns
- - **Prussian & Livonian Leagues thus refused** to support Lübeck's Wendish towns
- d) **1536: Treaty of Speyer**, by which Lübeck finally recognized defeat and the Dutch supremacy

Dutch Shipping Trades into the Baltic, 1557 - 1640

From: Aksel Christensen, *Dutch Trade to the Baltic About 1600: Studies in the Sound Toll Register and Dutch Shipping Records* (Copenhagen, 1941).

DIAGRAM I

Passages through the Sound from Western Europe to the Baltic 1557-1640
(Absolute figures. Logarithmic scale)

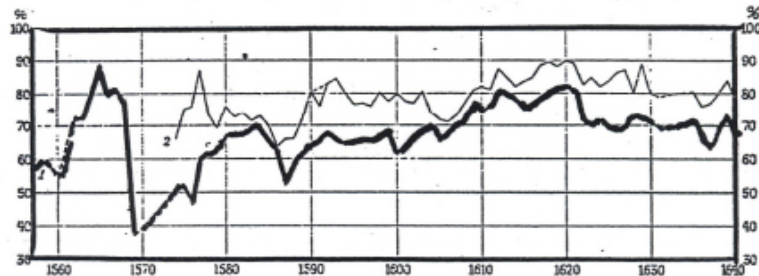


Curve 1 ———: Dutch
 - 2 ———: Other nations
 - 3 ———: Ingoing voyages in all
 - 4: Carrying capacity according to averages of chartered ships. Unit: 1000 lasts. Construction, cf. p. 103 esp. note 1

Unit:
100 ships

DIAGRAM II

Percentage Share of the Dutch in the Traffic through the Sound 1557-1640



Curve 1 ———: Share in ingoing voyages
 - 2 ———: Share in lastage paid

Northern Commerce: the Baltic, the Dutch and the Hanse 22

- (11) **Consequences of the Dutch Victory: commercial supremacy in northern commerce**
- a) **Graph is misleading** - neglecting Lübeck's frequent exemptions:
 - i) **Danzig port records: 1475-78** : Lübeck accounted for 49% of grain trade vs. 39% share for the Dutch
 - ii) **Danzig port records: 1550-55**: Lübeck's share of grain trade had fallen to 18%; Dutch share had risen to 53%

Northern Commerce: the Baltic, the Dutch and the Hanse 23

- b) **Long term consequences of Dutch victory are clear:**
- **-the Dutch gained commercial dominance in Baltic trades**
- **- from which the English were totally excluded:**
- **- when English returned in 1570s: outnumbered 13:1 by the Dutch**
- c) **16th & 17th centuries: Baltic became most crucial zone for the European economy:**
- **-for grain, lumber, metals: relatively scarce European supplies**
- **when Europe's population had more than doubled –**
- **to be seen in the next semester (January)**