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ECONOMICS 301Y1

The Economic History of Later-Medieval and Early-Modern Europe

LECTURE TOPIC NO. 11:

IV. INTERNATIONAL COMMERCE: Changing Patterns of International Trade in Late Medieval Europe, ca. 1280 - ca. 1520

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

VII. INTERNATIONAL TRADE and COMMERCE

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

1. Introduction: the importance of the Germans and the Dutch in medieval trade

a) **The story of the conflict between the German Hanseatic League and the Dutch – the seafaring towns of Holland and Zealand (aka: Zeeland):** has very great importance in European economic history, for both the medieval and early-modern eras.

i) **We first have to see how the German commercial towns of the Baltic Sea region and the Rhineland**

(1) came to dominate the commerce of northern Europe:

(2) while lacking their own national state (as part of the very loosely organized and scattered Habsburg or Holy Roman Empire).

ii) **We have to see next how four regional organizations or leagues of Germanic trading towns came to form the Hanseatic League,** in the mid 14th century: three town leagues in the Baltic zone, and the fourth along the Rhineland, leading to South Germany

iii) **That region of Hanseatic-German commercial domination included the following:**

(1) Russia, Poland, Lithuania, Prussia and other Germanic states (Mecklenburgh, Pomerania, Brandenburg) along the Baltic Sea,

(2) Scandinavia (Norway, Denmark, Sweden), the Rhineland and other parts of western Germany, (3) In the West: along the North Sea coasts: the Low Countries, northern France, and England.

b) **Then we have to understand the rise of the Dutch, the origins of Dutch commercial power:**

i) **we have to see how that small, peripheral region of Holland-Zealand,** with its seafaring towns, came to wrest (seize) commercial hegemony from the Hanseatic League, from the late 14th century.

ii) **Almost all economic histories on the Dutch begin the story far too late:**

(1) with the Revolt of the Netherlands against Spanish rule (from 1568), and then the creation of the Dutch Republic (Republic of the United Provinces), a topic to be considered in next term's lectures.[1]

(2) Instead, the story of the rise of the Dutch (or Hollanders), as a major commercial and shipping power must begin about 1360.

(3) In relation to a previous lecture, the lecture on medieval textile industries, it is also worth noting that the origins Leiden's very important woollen cloth industry are also about the same time: in the 1360s

iii) **The true 'Rise of the Dutch' came to involve the transfer of economic power from the Germans to the seafaring towns of** : Holland-Zealand, two feudal counties, north of Flanders, with the same ruler (Count of Holland and Zealand): part of the German Habsburg Empire

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[1] An example of this fault can be seen in the most recent such history (even if it purportedly begins in 1500): Jan De Vries and Ad Van der Woude, *The First Modern Economy: Success, Failure, and Perseverance of the Dutch Economy, 1500 - 1815* (Cambridge and New York: Cambridge University Press, 1996). The Revolt of the Netherlands is also know as the Eighty Years War: 1568 - 1648 (ending with the Peace of Westphalia in that latter year.

iv) **The major commerce of Holland-Zealand (i.e., the Dutch) was in the following major fields:**

(1) the herring fisheries and trades

(2) the closely related salt trade

(3) the trade in beer and grains: and beer had vastly greater importance then than it has today.

(4) the trade in lumber, naval stores, and metal ores (copper and iron)

(5) the shipping or carrying trades within and from the Baltic itself:

- after these basic, bulk goods, listed above, the next most important were western manufactures
- of which the most important were, of course, textiles from England and the Low Countries
- including of course, the fine woollens produced in Leiden, and in other Dutch towns

iv) **Herring, salt, and beer:** were commodities that

(1) the Germans had once exported from the Baltic, and

(2) which the Dutch came to control and then import into the Baltic zone:

v) **the rest of the story:** how the Dutch gained, in the 16th century, European mastery in both shipbuilding and shipping itself and then overall European commercial supremacy, has to wait until the second term (i.e., after 1500).

c) **For now the important consideration is to understand:**

i) the economic geography of northern Europe, and especially of the Baltic zone

ii) the structure and changing patterns of Baltic commerce

2. <u>The Baltic Zone: the Commodities in the Export and Import Trades</u>

a) **The Baltic Sea and Hanseatic German trade:**

i) **may be seen (in part) as a northern counterpoint to Mediterranean trade,** during the later medieval era,

ii) **but a commercial zone of relatively lesser importance,** with only three major similarities:

b) **Similarities between Baltic and Mediterranean trade:**

i) **First, although commerce in luxury goods from the Baltic zone was indeed important in the Middle Ages, we must note several important qualifications about their relative importance:**

(1) luxury commodities played far a less important role than spices, silks, etc., did in Italian and especially Venetian Mediterranean commerce;

(2) For only a few luxury-export trades were lucrative for the eastern Baltic, with far less importance than Asian spices in European commerce.

- namely furs -- from Russia and the eastern Baltic (sable, marten, beaver)
- and also, from this same region, amber and wax (for candles: Church candles especially).
- furthermore, the relative importance of these luxury goods waned by the later 15th and early 16th centuries

ii) **Second: another similar feature about the Baltic commerce: woollen textiles:** again provided the most important Western exports to the Baltic;

iii) **and the third similar feature: that western Europe came to experience a growing balance of**

payments deficits with the Baltic, also necessarily financed by silver shipments (exports).

c) **The differences to be seen in Baltic commerce are rather more important:**

i) **it represented a much greater reliance on high-bulk, low-valued cargoes in both foodstuffs and industrial raw materials:**

(1) but that does not mean that such trades were absent or unimportant in the Mediterranean

(2) even Genoa and Venice had important trades in fish, grains, and lumber, as I stressed last day.

ii) **In northern Europe, many important industrial raw materials:** came primarily from the Baltic zone, which became an increasingly vital source by the early-modern era:

d) **The Chief Commodities of Baltic Commerce:** in later-medieval trade

i) **forest products:**

(1) especially lumber and naval spars;

(2) from eastern Germany (Mecklenburg, Pomerania, Prussia), Poland, Scandinavia

ii) **potash** = potassium carbonate (K_2CO_3): with many important uses [2]

(1) sources of Baltic potash:

- derived from leaching ashes from burnt trees or vegetable matter
- or from mined deposits (Germany the prime source in modern Europe): i.e., mineral potash

(2) **industrial and agricultural uses of potash:**

- textile-dyeing (to permit blue dye in woad to become water soluble).
- and also for washing and cleansing wools
- but also an important fertilizer in arable agriculture
- and for making glass and soap
- and for 'saltpetre': in gunpowder

iii) **other naval stores:**

- flax [for linen/canvas sails];
- hemp [rope for rigging];

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[2] Potash (answers.com): Potash (potassium carbonate) and soda (sodium carbonate) have been used from the dawn of history in bleaching textiles, making glass, and, from about A.D. 500, in making soap. Soda was principally obtained by leaching the ashes of sea plants, and potash from the ashes of land plants. In their uses, potash and soda were largely but not entirely interchangeable. Indeed, before the mid-eighteenth century, people only vaguely differentiated between the two. With the advent of gunpowder at the end of the Middle Ages, potash found a new use for which soda could not substitute: the manufacture of saltpeter. Thus, the increasing demand for glass, soap, textiles, and gunpowder in sixteenth-and seventeenth-century Europe accelerated the decimation of the forests from which producers obtained potash. By 1850, potash had gained popularity as a fertilizer, but forests available for indiscriminate burning were becoming ever scarcer. Fortunately, deep drilling for common salt at Stassfurt, Germany, revealed strata of potassium salts, and in 1861 production of this mineral potash began. The United States, having decimated its forests, joined most of the rest of the world in dependency on German potash. The dependency still existed when World War I cut off this source of supply. Frantic efforts produced some domestic potash, notably from the complex brines of some western saline lakes. The United States surmounted the wartime urgency, but the shortage directed attention to reports of oil drilling that had brought up potash salts. These clues led to large deposits near Carlsbad, New Mexico. After 1931 a number of mines there supplied about 90 percent of the domestic requirement of potash. Some 95 percent of this production became fertilizer.

- pitch [a tar to caulk the ships – prevent leaks]:

iv) **metal ores:** copper and iron, both from Sweden.

v) **Baltic Grains and related foodstuffs: became even more important for western Europe:** some of which began as imports from the Baltic and ended up as imports to the Baltic

(1) **above all grains:** especially Prussian and Polish rye and barley (barley malt, for brewing beer)

(2) **beer:** became increasingly a major export, from the later medieval era

- first from the Baltic, then from Hamburg, and finally from the Netherlands
- Beer exports (from Baltic barley) had gained a strong stimulus in the mid-fourteenth century from the introduction of hop-brewing, which greatly improved their taste, stability, and portability.
- because both water an milk were dangerous to drink: beer was the almost universal drink in northern Europe, while wine was the universal drink in southern Europe (though in most of France, north and south, as well).
- as noted earlier, not until the late 19th centuries, with the discoveries of Robert Koch (Germany) and Louis Pasteur (France) did the world come to learn about the bacterial transmission of diseases.[3]
- and that in turn made governmental authorities realize that the chief vector for such disease transmission was polluted rivers, streams, and canals: whose remedy was the implementation of water purification projects, which soon led to a dramatic fall in mortality.[4]
- Estimates of per capita beer consumption in the Low Countries (and Hamburg) during the 15th and 16th centuries range from 202 litres to 313 litres per year.[5]

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[3] As noted in the earlier lectures on Demography. In 1876, Robert Koch had demonstrated that the bacterium *Bacillus anthracis* causes anthrax, a disease of animals also transmissible to humans. He subsequently discovered the two bacteria that cause tuberculosis and then cholera. In 1905, he won the Nobel prize in medicine. Pasteur's 1878 paper on micro-organisms in various beverages led to the 'pasteurization' process of heating milk to kill harmful bacteria in milk. See the website for Louis Pasteur et l'Institut Pastereur: http://www.pasteur.fr/pasteur/histoire/histoireUS/index.html. The other agent transmitting disease is of course the virus. For this, see *Answers.com*, on the internet: 'The existence of submicroscopic infectious agents was suspected by the end of the 19th cent.; in 1892 the Russian botanist Dimitri Iwanowski showed that the sap from tobacco plants infected with mosaic disease, even after being passed through a porcelain filter known to retain all bacteria, contained an agent that could infect other tobacco plants. In 1900 a similarly filterable agent was reported for foot-and-mouth disease of cattle. In 1935 the American virologist W. M. Stanley crystallized tobacco mosaic virus; for that work Stanley shared the 1946 Nobel Prize in Chemistry with J. H. Northrup and J. B. Summer'.

[4] See Louis P. Cain and Elcye J. Rotella, 'Death and Spending: Urban Mortality and Municipal Expenditure on Sanitation', *Annales de démographie historique*, 101:1 (2001), 139-54; and also Michael Haines, 'The Urban Mortality Transition in the United States, 1800-1940', *Annales de démographie historique*, 101:1 (2001), 33-64; and Louis P. Cain and Elcye J. Rotella, 'Epidemics, Demonstration Effects, and Municipal Investment in Sanitation Capital': paper presented to the University of Chicago' seminar on "The Economics and Biodemography of Aging," on 30 September 2005: to be published in a forthcoming festschrift for Tom Weiss.

[5] Richard Unger, *A History of Brewing in Holland, 900 - 1900: Economy, Technology, and the State* (Leiden, 2001), Table III-4, pp. 90-1, noting also that the daily beer ration for English and Hanseatic sailors was then about 5 litres.

- see the table in the appendix: indicating an annual mean consumption of 272 litres, or 0.744 litres per day: in various towns of the Low Countries and Germany, 14th-16th centuries
- see the graph on the beer and wine trades at Bruges in 14th & 15th centuries

(3) **herring:** first from the Swedish coasts; and then from the North Sea (i.e., later becoming an export to the Baltic).

(4) **salt:** first from the German Baltic lands near Lübeck; then from the Atlantic (also becoming an export into Baltic lands).

iv) **the Baltic zone would become even more important for grains, lumber, and metals:**

(1) by the early modern era, the Baltic would become the primary source of these commodities for many west-European towns;

(2) that would make the Baltic even more important than the Mediterranean zone from the later 16th to 18th centuries;

(3) trade in these imported Baltic commodities, furthermore, would worsen western Europe's balance of payments deficit with the Baltic zone, certainly by the 17th century..

v) **But in the late-medieval period,** beer, salt, and herring had an equal or perhaps even greater importance than did grain, lumber, and metals.

d) **The importance of salt for Baltic Commerce:**

i) **salt was vital as the universal preservative:** as stressed last day (in the discussion of spices)

(1) but the Baltic Sea itself provided little salt, because of its low salinity;

(2) i.e., it was too costly to extract salt from the Baltic Sea by evaporation methods, requiring large quantities of relatively costly fuels.

ii) **the primary source was instead inland, in the form of rock salt**

(1) in particular, the salt-flats of Lüneburg, near Lübeck;

(2) Lübeck thus virtually monopolized the trade in Lüneburg rock-salt.

iii) **In the late fourteenth century, however, this region suffered growing depletion of these salt flats:**

(1) that depletion led German and then seafaring towns from Holland-Zealand to exploit other more abundant sources,

(2) principally in France's Bay of Bourgneuf (southern zone of the Bay of Biscay): i.e., sea-salt, extracted from the ocean waters by evaporation

iv) **by the mid fifteenth century:** Bay Salt became an import that rivalled woollen textiles in aggregate value.

v) **Salt was especially vital for in the herring industry for 'curing':** both salt and Baltic herring together had provided the late-medieval German Hanse with their chief commercial mainstay.

d) **The Importance of Herring in German and then in Dutch Commerce:**

i) **herring is a very abundant, relatively cheap, and highly nutritious food**: [6]

[6] On 31 August 2005, Toronto newspapers reported the death of the world's oldest person on record: a Dutch lady named Hendrijke van Andel-Schipper, born 29 June 1890, 'who swore by a daily helping of herring for a healthy life'; she died peacefully in her sleep.

(1) with a European wide demand, when high protein food was scarce and relatively expensive.
(2) i.e., when meat and fowl were only seasonally available, often at very high prices

ii) **herring could be preserved (by curing) for storage and shipments over long distances**:

(1) Preservation was by two methods, of which the first was the more important:

- salt-curing, usually also involving pickling (salt, vinegar, spices),
- and also by smoke-drying;

(2) but salt was always the chief preservative and the chief element in preserving herring;
(3) It was not really possible to preserve and maintain the biological integrity, quality, and taste of salted meat and fowl in the same manner.
(4) Salted and cured herring therefore could readily and cheaply be stored for long periods of time, certainly during and over the winter months, when the supply of meats and vegetables was particularly scarce.
(5) Herring could thus be transported over long distances, requiring long periods of time, without any degradation in the quality of the herring, for the consumers.
(6) We know that for a later period, the Dutch were marketing herrings into the eastern Mediterranean (e.g., to Athens, in Greece).
(7) But note that fresh and smoked herrings were also sold, especially for local consumption.

iii) **herring was also important for its oils, as a lubricant:**

(1) Note its great importance for pre-petroleum societies: i.e., that European-North American societies did not gain access to petroleum products in any large degree before the late 1880s;
(2) Some lubricants were instead supplied by various vegetable agents:

- olive oil, coleseed and rapeseed,
- which became much more important in early modern Europe.

(3) But in medieval Europe animal fats in the form of lard and butter were the more important chief lubricants, and also more consumable lubricants;
(4) herring oils (and other fish oils) were also used;
(5) in particular, herring oils were used as lubricant in the woollen textile industries, to protect the fine fibres in the combing, carding, spinning, and weaving processes;
(6) but strictures against the use of herring oils (*hareng smout*) in Flemish textile guild ordinances tell us two things:

- that herring oil or grease was certainly regarded as inferior in quality to both the required agents: butter and olive oils
- that nevertheless the use of herring oil was widespread, or else there would not be so many persistent ordinances against their use.

iv) **Lübeck dominated both the salt trade and the Baltic herring fisheries,** principally by:

(1) controlling the Lüneberg salt flats (supplies of rock-salt), as the only economically feasible source of salt, before the importation of French Bay Salt in the 15th century;
(2) controlling as well the nearby spawning grounds at Scania, just off the Dano-Swedish coast, and
(3) by controlling the chief access routes between the Baltic and North Seas, to export the herring (and later

to import the French Bay salt).

- first overland by roads, and then,
- from the late 14th century, by a canal [Strecknitz canal] linking Lübeck and Hamburg, on the estuary of the Elbe river.

iv) **Subsequently when the herring shifted their spawning grounds to the North Sea:**

(1) and when the primary source of salt became the Bay of Bourgneuf and the French coast, Holland - the Dutch towns -- would use that geographic advantage based on closer access salt and herring to displace Lübeck and the German Hanseatic League that it controlled.

(2) Indeed the combined trade in both salt and herrings became the primary pillar of Dutch commercial power and the chief propellant of her mercantile expansion.

vi) **The view that herring was a mass-consumption commodity has been challenged, however**: **by Prof. Richard Unger (1980),** in an article on the Dutch herring trade, in which he argues that until later 16th century or after, herring was a luxury commodity sold chiefly in higher income markets.[7]

vii) **I am unconvinced for these following reasons:**

(1) wage and price data for Antwerp c. 1500 shows that a skilled mason or carpenter could then purchase about 50 smoked herrings with his daily (summer) wage.

(2) Unger himself states that ca. 1650 the Dutch were marketing 200 million herring a year, while controlling only half the European market or less.

(3) Europe's population was then about 100 million (possibly 120 million), only a small part of which was accessible to Dutch water-borne trade.

(4) So who then was buying over 400 million herring?

(5) No evidence is provided to indicate that the medieval German herring trade was a luxury trade in the way that the Italian trade in spices had clearly been.

3. <u>the German Hanseatic League and Lübeck</u>

a) **The German Hanseatic League:**

i) **This league of German trading towns was created by a series of conflicts between both Flanders (over the Bruges kontor) and Denmark,** between 1356 and 1370;

ii) **The Treaty of Stralsund, signed in 1370,** by Denmark and the Baltic Hanseatic towns, ending their war, marks completion of the formal creation of the League:

(1) the treaty recognized the Germans' victory over Denmark and their control over the Scania fisheries, which actually lay within Danish territory (i.e., in Danish-controlled southern Sweden).

(2) Lübeck was the acknowledged leader of the new confederation of German trading towns,

(3) with a central parliament or Diet – often, though not always, held in Lübeck itself.

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[7] Richard Unger, 'Dutch Herring, Technology, and International Trade in the Seventeenth Century,' *Journal of Economic History*, 40 (1980), 253-79. Republished in Richard W. Unger, *Ships and Shipping in the North Sea and Atlantic, 1400 - 1800*, Variorum Collected Series CS 601 (Aldershot , 1997).

ii) **The Hanseatic League was actually a loose confederation of four regional town-leagues:**
three of which were based on maritime trade, and the fourth on overland trade.
(1) the Wendish League in the western Baltic, led by Lübeck in alliance with Hamburg and Bremen;
(2) the Livonian League, led by Riga (then a Germanic town), in the eastern Baltic;
(3) the adjacent Prussian League, dominated by Danzig and the Teutonic Order; and
(4) the Rhenish League, of Rhineland towns, led by Cologne, which dominated the overland trade routes into southern Germany and Central Europe.

b) **Together the Hanse jointly controlled four major trading factories or *kontors* abroad:**

- note that the French word is similar: *comptoir* - literally 'counter' or trading warehouse
- the most common English word for this was 'factory' (but had nothing to do with manufacturing – but instead solely with trade)

i) **Bruges, in Flanders,** by far the most important *kontor* : and
ii) **London, England:** the 'Steelyard'
iii) **Bergen, in Norway**: for Scandinavian trade
iv) **Novgorod: the Peterhof:** the eastern terminus of Hanse trade routes, for the Russian fur-amber-wax trade.

c) **The German Hanseatic League was only a loose confederation:**
i) it did have a federal parliament called a Diet, as just noted
ii) and it did have a central treasury;
iii) *but* it lacked any real central administration;
iv) and it certainly did not possess any unified armed forces or navy,
iv) thus depending solely on the naval power offered by individual Hanse towns, chiefly those in the Baltic trade.

d) **Lübeck:**
i) **as noted earlier, Lübeck had become the natural leader of the German Hanseatic League,** based on its dual control (to repeat the key, vital points):

- over the commerce in salt and herrings and
- the access routes between the Baltic and North Seas

ii) **Lübeck's dominance over the League came to be challenged and then seriously undermined in the 15th century from both external and internal threats:**
(1) **external threats:** the rise of Dutch and then English competition, especially after their commercial invasions of the Baltic in the later 14th century.
(2) **internal dissensions from the regional constituent town leagues:** many of whose towns wanted direct and unfettered trade with the English and Dutch, while others wanted to exclude them
iii) **For Lübeck and many others in the Hanseatic League, this dual invasion came at the very wrong time:**
(1) just when their markets were seriously contracting, after the Black Death (and during the 'Great Depression')

(2) Such a threat thus provided the Hanseatic League with its prime *raison d'être*: monopolism and collective protectionism.

iv) **Lübeck itself was concerned about the transit trade between the Baltic and North Seas,** and thus, more than other Hanse towns, saw a greater threat from the Holland-Zealand towns.

(1) For, unlike the English, the Hollanders (Dutch) offered their ships as common carriers on terms very appealing for the Prussian-Livonian towns.

(2) Furthermore , the Hollanders (Dutch) were willing to buy their furs, timber, grain, and naval stores for ready cash, without attempting (initially) to bypass Prussian towns in marketing their own goods

(3) Leiden, as the leading Dutch textile producer, also offered woollens as fine as the Flemish;

(4) the North Holland towns had also become powerful competitors in the beer and salt trades.

4. **The Rise of the Dutch: the Key Factors**: **Political and Economic Geography**

a) **Social Factors for Freedom: Economic, Social, and Political Freedoms:**

i) **the virtual absence of feudalism, manorialism, and serfdom:** as indicated in the earlier lecture on Agriculture in the Low Countries (not delivered orally, but posted online)

ii) **Holland in the 15th century had only 12 feudal families,** owning just 10% of the lands, which, they rented out as freehold tenancies to a virtually free peasantry.

iii) **About half of the peasantry in Holland -- 42% -- owned their lands outright;** most of the rest held rental lands rented their holdings for annual cash quitrents, without any other obligations.

b) **Agrarian factors:** repeating some key factors from the earlier lecture on late-medieval agriculture in the Low Countries, but with particular reference now to Holland:

i) **Land Reclamation by Free Peasants:**

(1) Indeed much of the agricultural land, especially the pasture lands, in both Holland and its southern neighbour Flanders had been long ago reclaimed from the sea by free peasant communities.

- vast systems of dikes (aka: dykes) were constructed, with sluice gates to drain the lands, which often remained below sea-level (and thus protected from sea-flooding by the dikes
- the lands so reclaimed required several years for full drainage and the de-salinisation (i.e., removal of the salt)

(2) Thus, for such labourious and time-consuming undertakings, the medieval counts of Holland and the Church (monastic abbeys) could attract colonist settlers only by offering these peasants full freedom and very low cash rents for their new lands.

(3) A modern map of the Netherlands show far more land, land reclaimed in recent centuries, than would have been found in the 15th century.

(4) In that later-medieval era, despite centuries of land reclamations, Holland and Zealand still constituted a network of islands, peninsulas, and inland water-ways connected to river systems that necessitated shipping as a way of life.

(5) Much of the land so reclaimed from the sea, drained, and then desalinated, were originally used as pasture lands for raising livestock, principally cattle.

ii) **The Livestock Foundations of Dutch Agriculture and Dutch Society**:

(1) Partly for this reason, later-medieval Holland had an agrarian economy that was basically pastoral: i.e., livestock raising rather than the cultivation of grains and other arable crops.

(2) In a stimulating article, the now very renowned American economic historian, Professor Jan de Vries (formerly the Provost at Berkeley) has argued that agrarian economies based on livestock rather than on arable (i.e., grain growing) are better able to resist feudalism, manorialism, and enserfment.[8]

(3) De Vries: 'The mobility of a herding population and the ability of livestock to serve as a medium of exchange make herders less exposed to enserfment than a sedentary arable farming population'.

i.e., far more successful in resisting feudal-manorial encroachments than grain-based economies, such as those found in the later-medieval English Midlands, and in northern France.

(4) Furthermore, because livestock husbandry is labour extensive and highly specialised, it leads to naturally to supplementary bye-employments, to obtain other foodstuffs: especially fishing and trade.

(5) For Holland in particular, situated on the North Sea, with many inland water ways, that meant:

- coastal fisheries: the herring trades
- maritime commerce to secure grains and other foodstuffs
- most Dutch villages were located on or near inland waterways provided much easier access by ship than by horse

(5) Livestock economies for these reasons become monetized earlier and more fully than grain-based arable economies – and none more so than late-medieval Holland and Zealand.

(6) **Note the Latin word for money: *pecunia*** - from *pecus*, meaning 'cattle'

iii) **Individual Farms:**

(1) In both Flanders and Holland, there was almost no communal farming, for either pastoral or arable forms of framing;

(2) farming was almost entirely undertaken on individual (unified), private, small-scale farms, which were amongst most productive in Europe.

iv) **Highly Advanced Agriculture**: **Agricultural Precocity, as previously noted:**

(1) one of the very earliest benefits of economic freedom, the freedom from feudal and servile constraints, was the very high level of agricultural productivity

- which freed labour and resources for employment in trade and industry,
- permitting and promoting population growth, especially urban growth.

(2) Indeed this whole region of the Low Countries (comprising modern day Belgium and the Netherlands) enjoyed a very high level of agricultural productivity, the very highest in northern Europe (as argued in more detail in lecture no. 7: part 2).

(3) High agricultural productivity freed labour and resources for employment in trade and industry,

- and thus promoted both urbanization and commerce, especially overseas trade,

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[8] Jan de Vries, 'On the Modernity of the Dutch Republic', *The Journal of Economic History*, 33 (March 1973), 191-202.

- which in turn promoted further demographic growth.

v) **Agricultural productivity and urbanization**: three key features

(1) by the mid-fifteenth century, Holland had become 45% urbanized

- and by the early 16th century, 54%: more so than Flanders or Brabant, or any other region in the Low Countries (let alone in England).
- Readily accessible urban markets and high population densities both promoted highly commercialized agriculture and necessitated very intensive methods of cultivation.

(2) **Importance of foreign trade for this agriculture:**

- This livestock-oriented agrarian structure, population growth, and urbanization themselves depended heavily on the expansion of foreign trade, especially for grain imports.
- note from the earlier lecture on agriculture in the Low Countries (no. 7: part 2), that a very highly diversified arable agriculture, with widely diverse crops, diminished the relative importance and thus role of grain cultivation.
- As we shall see, the Dutch economy depended heavily also upon the simultaneous growth of the fisheries, the herring fisheries.

(3) consequent land scarcity and its very high price:

- provided a strong disincentive against investing commercial profits into land, as was so common elsewhere (including England);
- conversely, strong incentive to reinvest commercial profits back into commerce, some into industry (especially trade-related industries),
- but more and more into banking and finance, as noted both earlier and again later.

b) **Political Factors: Government by the Towns and Commercial Freedom**:

i) **Most of this region was technically or theoretically part of the Habsburg Empire,**

(1) the so-called Habsburg Holy Roman Empire (largely Germanic);

(2) but the German Habsburg emperors in fact had almost no influence in this far distant corner of their loose and far flung empire.

(3) Flanders, to the south of Holland, it must be noted, was a French feudal fief of and thus a part of the kingdom of France: but only the regions west of the Scheldt (Escaut) River

(4) Eastern Flanders, east of the Scheldt was also part of the Holy Roman (Habsburg) Empire.

(5) See the earlier on-line lectures notes on Agriculture in the Low Countries (lecture no. 7: part 2)

ii) **With the absence of strong monarchical rule,** the mercantile towns gained much power in most of the Low Countries, especially in the county of Holland.

iii) **The Dutch Civil War of the 1420s and the victory of the towns:**

(1) When the last native count of Holland (William of Bavaria) died, in 1417, without a direct male heir, his daughter Jacqueline of Bavaria became Countess;

(2) But, in the 1420s, a civil war ensued, because:

- her sex (gender) and her marriage to the neighbouring duke of Brabant (Jan IV) aroused grave opposition (in what was still a patriarchal society);

- the brother of the last count (John of Bavaria, bishop of Liège) laid claim to the counties of Holland and Zealand (and Hainaut), and got support from Duke Jan IV of Brabant,
- that forced Jacqueline to flee to England, divorce her husband, and marry the Duke of Gloucester, who then brought an English army to Holland to support her claims to Holland and Zealand:
- thus violent warfare ensued, but essentially a civil that was between:
    - the towns: known as the *Kabiljauw* [Cod] party, supporting Bishop John of Bavaria (Liège), and then in fact, urban independence
    - and the small aristocracy: known as the *Hoeks*, who supported Jacqueline and duke of Gloucester.

(3) The French duke of Burgundy (Duke Philip the Good: r. 1419-1467), then ruler of the neighbouring county of Flanders, intervened to support the Kabiljauws, i.e., the leading towns in this civil war, in return for the town's support of his claim to be the new titular ruler (*ruwaard*) of Holland-Zealand, in 1428.

(4) The Kabiljauws and the town governments thus won the war with Philip's aid;

(5) By the Treaty of Delft in 1428, Jacqueline was forced to leave, and then to abdicate (in 1432), making Philip duke of Burgundy now formally the new count of Holland and Zealand.

v) **Political Structure of Holland after 1428**:

(1) Thus the twin counties of Holland-Zealand became part of the Burgundian Low Countries -- i.e., ruled by the French dukes of Burgundy.[9]

(2) The Estates or parliament of Holland consisted of 17 town representatives and only 1 member for nobility:

(3) Holland was thus ruled decisively by the towns, and the towns by the merchants, with little interference from the prince (until the Revolt of the Netherlands against Spain, in 1568).

d) **Physical Geography of the Low Countries**

i) **the Low Countries lay on the estuaries of three key rivers**,

(1) as the map indicates, all these rivers flowed into the North Sea basin:

(2) namely, the Scheldt (Antwerp), the Meuse or Maas (to Zealand via Liège), and the Rhine (Dordrecht and Rotterdam),

(3) thus giving this region easy access to northern France, Germany, and Central Europe.

ii) **This region thus lay on shores of North Sea**: the chief highway and crossroads for northern European trade, linking Scandinavia and the Baltic lands (Germany, Poland, Russia) with north-west Europe.

iii) **Similarly sea routes via English channel**: linked region with coastal France, Spain, Portugal, and the

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[9] Subsequently, from 1482, the Burgundian Low Countries passed into the hands of the Habsburg Emperor, by dynastic marriages. In 1555, the Holy Roman or Habsburg Emperor Charles V (King of Spain from 1516 and Emperor from 1519) abdicated, and thereby split the Habsburg Empire split into two parts. His son Philip II became king of Spain (1556-98), which kingdom included the Low Countries. Charles' younger brother (uncle of Philip II), Ferdinand I (r. 1558-1564), became the new Holy Roman Emperor and ruler of most of Germany and much of Italy . Although the specific details do not really matter all that much, Spanish rule and the subsequent Revolt of the Netherlands against Spanish rule, beginning in 1568 (and lasting until the Treaty of Westphalia, in 1648), will become the vital factor in the future destiny of the Dutch Republic (formed by the Union of Utrecht in 1579), as will be seen in the second term lectures.

Mediterranean basin.

iv) **Geography and Historical Tradition**: 'Nothing Succeeds Like Success': These geographical factors help explain why this region had dominated the commerce and finance of northern Europe from the 12th century, and why it continued to do so until the late 18th century.

(1) Indeed, this region had a centuries-long tradition of European economic leadership, dating back to the Middle Ages (to the 12th century):

- a tradition of industrial, commercial, and financial expertise.
- no region in all of Europe, not even Italy, can compare with the Low Countries in economic importance, in dominating the European commercial economy over such a long period of time: from 12th to the mid-18th centuries, to the eve of the Industrial Revolution.

(2) In terms of maritime port-towns serving as commercial capitals of northern Europe,

- we begin with the port of Bruges in Flanders, dominating commerce and finance from the late 12th century up to the 1460s;
- then we move eastward to the port of Antwerp (in Brabant), which held that role for about a century, from the 1460s to the 1560s;
- and then we move northward to the port of Amsterdam in Holland, which exercised that commercial dominance for the next two centuries, from the 1560s to the 1760s, when it finally lost that role to London (who held it until 1914).

5. **<u>The Dutch Mastery over the European Herring Trades</u>**:

a) **The Herring Fisheries in the Baltic and the North Sea:**

i) **Dutch fishermen had long participated in the Scania herring fisheries:** on the southern Swedish coast (across from Denmark, as noted earlier):

(1) but only in a minor way, since these fisheries were fully dominated by the Baltic Germans.

(2) As noted earlier, the final stage in the creation of the Hanseatic League, as a formal confederation of the four regional trading towns,

- was the Treaty of Stralsund in 1370: by which Denmark (which then governed Sweden)
- it ceded control of the Scania fisheries, on the south coast of Sweden, to the Hanseatic League

(3) Dutch shippers were the first to master the tricky navigation of sailing directly around Denmark into the Baltic, from about the 1250s, though few in fact used it before the late 14th century.

ii) **The Dutch coastal towns were also engaged, as noted earlier, in some independent herring fishing,** in subsidiary spawning grounds in the North Sea, in their own backyard, as it were.

iii) **Technological Changes**: **new fishing boats, nets, and curing methods**

(1) **During the later 14th and early 15th centuries,** the Dutch developed superior technical methods both in construction of their fishing boats and in methods of salt-curing.

(2) **The three innovations (two major one) were, in fact, interrelated, and they partly predated the shift in spawning grounds:** fishing boats, fishing nets, and on-board salt-curing.

b) **The Technological Changes and their economic impact:**

i) **the buis (buizen)**: a new fishing boat, a large, flat-bottomed cargo boat (round stern), with three sets of sails for manoeuvrability, with about 140 tonnes capacity.

(1) They were designed for deep-sea fishing

- for periods of a week or more, and
- for holding vastly larger catches of herring, in contrast to traditional German crafts,
- which were little better than row-boats designed for daily outings in coastal waters.

(2) Obviously, from any map, in order to fish the North Sea grounds, Dutch had to stay out for a week or more: and they were often closer to English coastal waters than to those of Holland

(3) and thus they had to accommodate the much larger scale catches of herring, held on board for a much longer period.

ii) **Herring fishing nets:** the Dutch also designed much bigger, stronger fishing nets, which could be strung between two or more of these fishing craft (buizen).

iii) **Innovations in curing herring**: on board gutting and salting of freshly caught herring.

(1) The traditional method had been to gut or disembowel the herring onshore, on return from the fishing expedition: i.e., to fill the cavity with salt and pack them in barrels with brine.

(2) The Dutch innovation, dating from the late 14th century, was to do all this on board the ship, immediately after catching the herring, when the fish was at its freshest.

(3) But obviously onboard curing was a necessity if the ship was to stay out for a week or more;

(4) and this was only possible with a very large ship, with space for both salt and the cured herring.

(5) The advantage was initially only in cost, from economies of scale, as compared to on-shore curing;

(6) the initial quality may have been inferior (often necessitating on-shore resalting and pickling).

(7) **Quality Improvements:** developed only accidentally, it appears, during the 15th century,

- from the haste involved in on-board gutting: thus leaving of the stomach appendices in the herring (with speed of gutting).
- These stomach appendices (pyloric caecae) in fact contained the chemical trypsin, which speeded up the curing process (freshness) -- a more immediate seal –
- and thus improved both aroma and taste, giving Dutch herring a major quality advantage.

(8) So this essentially dual innovation in ship design and curing allowed the Dutch to gain considerable economies of scale while improving the quality of the product.

(9) But those economies and quality improvements were partly offset by additional cost of repacking the herring on shore.

(10) With these innovations, the Dutch able to capitalize on the next major, decisive, but fortuitous event, involving the herring fisheries.

c) **The shift of the Spawning grounds of the Herring from Scania to the North Sea**:

i) **The Traditional theory and its critics:**

(1) Sometime in early fifteenth century,

- the herring mysteriously altered their spawning grounds, deserting Scania
- to concentrate almost entirely on the North Sea spawning grounds, between Holland and England.

- possibly during the 1420s or 1430s,

(2) This view, which is found in some of the literature, does not command unanimous support.

(3) Surprisingly, in one of the most recent and authoritative accounts of early-modern Dutch economic history, we find this rather different view, evidently espoused by Prof. Ad van der Woude:

- Noting that in the early 17th century, of the mean annual catch of 20,000 lasts of herring, 40% was sent to the Baltic and 20% to north-west Germany, he comments:
- 'The explanation of this market development must be sought in the unfathomable capriciousness of nature, which beginning in 1589 removed the herring schools from the Swedish coast [i.e., Scania]. The Scandinavian fishery that earlier had supplied the Netherlands now could not satisfy local markets.'[10]
- No mention is made of the traditional literature that dates such a move in the spawning grounds to more than a century earlier.

(4) In a recent paper, however, a Danish-American historian cites a text, from 1425, by the Norwegian author of *The Rufus Chronicle*:

> This autumn, as of old, the merchants and the fishermen from the towns travelled to Scania in Denmark [sic: southern Sweden, then under Danish control] for the herring catch ... but for whatever reason, no herring came into the Sound. Rather they betook themselves to the North Sea and made the Flemish and the Dutch rich. Because God had withdrawn and denied His blessings from the Danes, which is evident to all.

(5) But then he cites the following text by the Swedish chronicler Olaus Magnus, from the following century, probably written before 1589: with undoubtedly poetic exaggeration, it indicates the abundance of herring then to be found off the Swedish coast:[11]

> herring arrives at the [Scania] coast in such numbers that not only do the nets of the fishermen burst, but also if one sets a doubled-edged war axe or halberd in to the school of fish, it will remain standing.

(6) The author cannot, in my view, get away with this assumption that the sixteenth-century Magnus chronicle contradicts and refutes the fifteenth-century *Rufus Chronicle*, without taking account of the possibility that

- the Scania herring fisheries did indeed suddenly decline in the 1420s

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[10] Jan De Vries and Ad Van der Woude, *The First Modern Economy: Success, Failure, and Perseverance of the Dutch Economy, 1500 - 1815* (Cambridge and New York: Cambridge University Press, 1996), pp. 248-49. See also Table 7.2 on 'Last of Herring Shipped from the Netherlands through the Danish Sund, 1562 - 1780: annual averages'.

[11] I was one of the referees for this paper, submitted to *The International Journal of Maritime History*: John P. Maarbjerg, 'Of Herring, Salt and the Decline of the Scanian Fairs'. Though I provided a favourable recommendation, it has not yet been revised and resubmitted for publication.

- but then revived in the course of the following century.

ii) **The Evidence from Herman Van der Wee:** [12]

(1) **Quality**: herring in barrels [833 herrings per barrel]: wet salt herring, initially mainly from Scania, but from the second quarter of the fifteenth century mainly the Antwerp and later the Malines brand [of wet herring].

(2) **Composition of the Series:** he states that: 'For herring in barrels we have taken as [the] basis the magnificent series of the Poor Relief in Lier, which bought for distribution to the poor 10,000 to 20,000 herrings on the markets of Antwerp and Malines, every year in Lent.'

(3) **Historical note provided by Van der Wee**. ' The first explicit mention known to us of [salted] herrings in barrels that were not from Scania occurs in 1421: *harinc die men seit van binnenlants dat men ghenen scoenssen hering en vant* ['domestic herring purchased because no Scania herring could be obtained']. From that time the purchases of barrel herring from Scania became increasingly rare and from the second half of the fifteenth century they completely and finally made way for the herring of Brabant (first the brand from Antwerp, later from Malines)....'

d) **Theories to Explain the sudden decline of the Scania herring fisheries by the 1430:**

i) **Change in the salt level of the Baltic (from fresh water intake)**:

(1) not yet explained fully, though evidently from melting glaciers:

(2) note that the 15th century was an intermediate period of renewed warming, coming between two cooler eras, though the 1420s and 1430s were unusually cooler decades

- the first, fairly mild, from ca. 1150 - ca. 1350;
- and the other, much colder, from ca. 1550 - 1850 (peaking the 17th century), popularly known as the 'Little Ice Age'

(3) Note: the saline content is extremely important in determining the growth and supply of the plankton and other sea life from which herring feed.

(4) The much saltier North Sea came to have a decisive advantage in more abundant and richer food supplies for herring.

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[12] Herman Van der Wee, *The Growth of the Antwerp Market and the European Economy, 14th to 16th Centuries* (The Hague, 1963), 3 vols, Vol. I: *Statistics*, Appendix 22: 'Herring in Brabant', pp. 277 -86.

(5) There is, however, no direct evidence that the Baltic Sea because less saline in this period

(6) It also seems unbelievable that it would become dramatically less saline – have an influx of so much fresh water – in such a short space of time (the 1420s)

ii) **Depletion from overfishing, in response to Dutch competition**:

(1) i.e., with no constraints on using an unregulated public good.

(2) The hypothesis is simply this: that individual German fishermen responded to growing Dutch competition by increasing their own catch – perhaps to try to flood the market,

- leaving insufficient herring for spawning,
- and thus quickly destroying their own fishing grounds.

(3) This seems to me to be a much more compelling argument: especially when we consider our own recent economic history, with the fairly sudden destruction – from over-fishing – of the Atlantic (Newfoundland) cod fisheries, along with fear that the same fate awaits the Pacific salmon fishery.

e) **Dutch mastery in the Atlantic Salt Trade:** another key advantage

i) **Once the Lüneburg rock-salt flats (SW of Lübeck) had become largely depleted,** the next major alternative supply, on the Atlantic coast, was far closer to the Dutch homeland:

ii) **As noted earlier,** those major sources were the salt flats of Bay of Bourgneuf (France) and coast of Portugal, thus giving the Dutch a major transport advantage in this crucial trade.

f) **Summary: Dutch Commercial Advantages from controlling North Sea herring fisheries:**

i) **Much lower transport costs involved than with the Scania fisheries,** as well as lower costs involved in the salt trade.

ii) **North Sea herring:** greater salt content in the North Sea (greater salinity with warmer waters, warmed by Gulf Stream) meant more plankton food for the herring; and that meant much larger herring -- 33% to 50% larger than Baltic herring

iii) **More trypsin in these herring,** to facilitate curing.

f) **The Dutch herring trade in the 15th and 16th centuries**:

i) **during the 15th century, these innovations and cost advantages,** along with the shift of the herrings' spawning grounds,

(1) enabled the Dutch to wrest control of the herring fisheries away from the Germans

(2) certainly these fisheries were lost to the Germans by the mid-15th century.

ii) **That loss undermined German economic power and allowed Dutch trade to expand.**

iii) **The Dutch marketed herrings to all European ports**: from the Baltic, along the Atlantic, to the Mediterranean, necessarily picking up return cargoes.

iv) **Herring trades provided a strong stimulus to Dutch shipbuilding**: which gave the Dutch a further incentive to invade the Baltic commercial zone in order to obtain the necessary ship timbers (from Scandinavia, Poland, Prussia).

v) **The Fisheries and Dutch Employment:**

(1) In 17th century, the Dutch herring fisheries and trades came to employ about 20% of Holland's adult population, directly and indirectly;

(2) their fleets of over 500 busses produced about 200 million herring annually;

(3) and the value of their herring exports well exceeded the value of England's chief export, which was woollen textiles.

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

Years	Lasts of Herring*	Years	Lasts of Herring*
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).

Source: Jan De Vries and Ad Van der Woude, *The First Modern Economy: Growth, Decline, and Perseverance of the Dutch Economy, 1500 - 1815* (Cambridge and New York: Cambridge University Press, 1996), p. 249.

6. **Expansion of Dutch Trade Into the Baltic Sea Regions**: **Wars with the Hanse**

a) **The Dutch began to invade the Baltic trades in the later 14th century**:

i) **they began innocently enough as mere agents or subcontractors for the Germans**:

(1) they undertook this role, because the safest and most direct route from Hamburg to German markets in England, Low Countries, and France went through or via the Dutch coastal towns and inland waterways.

(2) Thus Dutch coastal shippers and fishermen, with obvious advantages in sailing these waters, took over some of this re-transport trade.

ii) **The Development of a Direct Sea route into the Baltic:**

(1) As previously noted, the North Holland maritime towns had been the first to master the very tricky navigation of sailing directly around Denmark, from the 1250s: sailing through the Skaggerak, Kattegat, and Danish Sound (Sund) directly into the Baltic Sea.

(2) But only from the later 14th century did they and the English begin utilising this direct sea route in a major way,

- to threaten Lübeck's primacy (primary role) in the Baltic-North Sea trade,
- just when that trade was contracting, chiefly from declining population and warfare;

(3) the Dutch did so only in the 1390s, after the English began entering the Baltic in forces, having established a commercial base in Prussia by the 1370s.

(4) As you can readily imagine, a direct sea-route without any transshipping was much cheaper than the

traditional overland and then canal route linking Hamburg and Lübeck.

iii) **The herring trades and the Baltic:**

(1) also as just noted, the Dutch rapidly expanded control over the herring trades during the early to mid 15th century,

(2) thus becoming indeed the major supplier of both herring and salt in the Baltic region.

iv) **at the same time, they similarly increased their share of the beer trade:** to wash down all that salted herring, one might suppose

v) **they also increased their shipments of woollen textiles:** again, textiles constituted the most important set of manufactured goods entering into the Baltic trades.

vi) **For return cargoes from the Baltic,** Dutch shippers sought out Baltic ship timber and naval stores to build up their fleets, and grains to feed their growing towns.

vii) **Dutch aggression and the late-medieval 'depression':** This combined Dutch-English invasion of the Baltic came at the very time, to repeat the point made above, when the aggregate Baltic trade was contracting with falling population, disruptions from warfare, and then economic depression.

viii) **The German reaction to this invasion was a natural one**: hostile monopolism to keep out the foreigners, by force if necessary.

b) **The Hanseatic Germans then made a fatal error**: in early 15th century, they concentrated upon the English threat, while initially ignoring the Dutch, until much too late.

i) **The English appeared to be a bigger threat because**:

(1) they were a major military power, with a strong navy, that had almost conquered France in the Hundred Years War;

(2) the English were also becoming the most important producer of woollen cloth, which, as just stressed, was the major manufactured commodity sold in Baltic markets.

(3) the Germans mistakenly viewed the Dutch as subsidiary members of their own Hanseatic League, dependent on the Germans, and as weak rivals who could be later coerced into submission.

ii) **To make a long story short**: **by the mid-15th century the Baltic Germans had effectively beaten the English**: and had effectively excluded them as an important player in the Baltic trade:

(1) English trade and commercial privileges in Prussia, expanding from the 1370s, had in fact reached their

peak with a Prussian treaty in 1407:

(2) but from then on, it was downhill for the English.

(3) In 1437, a promising reciprocity treaty with the whole Hanseatic League was never ratified by the Germans.

(4) Finally, in 1474, the English were forced to sign a treaty, the Treaty of Utrecht:

- which recognized their virtual commercial exclusion from the Baltic (i.e., no privileges),
- while also confirming the Germans' historic right of full commercial privileges within England, superior to those of other aliens (dating back to King Edward I's *Carta Mercatoria* of 1303).
- as noted before, the Hanseatic merchants paid a lower export duty on English woollens – just 12d – than did native English merchants, who paid 14d (and far lower than that paid by other alien merchants: 33d = 2s 9d).

iii) **But in the middle of this Anglo-Hanseatic struggle the Dutch attacked in force**: from the later 1420s, after allying with the Danes, they fought several naval and piracy wars with the Baltic Germans, led by Lübeck.

iv) **The Germans, however, did not then wish to fight a two-front war**: and so temporarily they bought the Dutch off with a truce (Treaty of Copenhagen, 1441), which gave them free access to the Baltic, and thus to much of Germany, Poland, the Courland (modern day Estonia, Latvia, and Lithuania), and Russia.

v) **Lübeck (and its Wendish League) intended to renege on this treaty after finishing off the English**: but by the 1470s, the Dutch were too strong, militarily and commercially; and the Germans too weak and divided.

vi) **German internal dissension was crucial weakness**:

(1) In the eastern Baltic, in Prussia and Poland especially, landowners and local merchants found that they got better terms in trading with the Dutch, than with the Wendish (i.e., western) Hanse;

(2) and indeed the Hanseatic towns of the two eastern leagues, the Prussian and Livonian, also found Dutch trade too attractive to ignore, with quicker and cheaper service, and better trading terms.

(3) So they refused or failed to support Lübeck and its allies in war against the Dutch, and let Dutch commercial power expand.

vii) **Thus Lübeck's suffered continued reverses:**

(1) in all its military and diplomatic attempts to exclude the Dutch from the Baltic during the later 15th and early 16th centuries.

(2) Not until 1536, with the Treaty of Speyer, did Lübeck and the Wendish League finally concede defeat and allow the Dutch full freedom of trade in the Baltic.

viii) **Some statistical evidence on Dutch and German shipping in the Baltic:**

(1) the graph on the screen indicates that, by the mid-16th century, the Dutch were already accounting for the major portion or even the lion's share of Baltic shipping, according to the data collected from the Danish Sund tolls on ships entering the Baltic.

(2) But its interpretation is somewhat problematic for many reasons, especially the fact that some groups of merchants (Scandinavians, and sometime Lübeck's Wendish League towns) were exempt from the tolls.

(3) Danzig's port records 1475-88: especially important for the grain trade, indicate that

- Lübeck still accounted for almost half – 49% – of the grain trade
- Other Wendish and Pomeranian port towns: 12%
- Dutch: for about 39%

(4) Danzig's port records in 1550-55: by which time Danzig's trade had tripled[13]

- Lübeck's share had fallen to 18%
- Dutch and other western towns: had risen to 53%

(5) Certainly by that time, and even earlier, the Dutch enjoyed a significant advantage in shipping costs, for reasons that we will see when we resume the story of Dutch maritime trade, in the second term.[14]

ix) **Summary of Dutch Baltic trade in the 15th century:**

(1) Dutch imports into the Baltic: most were formerly German exports from the Baltic (except for the last three: textiles, wines, and spices)

- herring
- salt

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[13] Michael North, *Geldumlauf und Wirtschaftskonjunktur in südlichen Ostseeraum an der Wende der Neuzeit* (Sigmaringen, 1990), p. 140; De Vries and Van der Woude, *The First Modern Economy*, p. 353.

[14] I will be discussing this evidence more thoroughly when we return to Dutch commerce, from the 16th to 18th centuries, in the second term, when I shall supply you with alternative or somewhat different figures that I have processed from the Sund Toll accounts; and they suggest a somewhat lower share for the Dutch. See the bibliography on the Rise of the Dutch (for essay topics).

- beer
- wines
- textiles
- spices
- silver: to settle balance of payments deficits

(2) Dutch exports from the Baltic (taken over from the Germans)

- grains: rye, wheat, barley
- lumber
- naval stores, for shipbuilding: flax (linen), hemp, pitch
- metals (from Sweden): copper and iron
- silver: to settle the balance of payments deficits

x) **The Dutch and the English in the Baltic:**

(1) These two related events -- the English defeat and the Dutch victory -- gave the Dutch a crucial century head start in the vital Baltic trade, now the most important arena of European commerce.

(2) The English, however, were never physically excluded from the Baltic and continued to trade, in a very minor way, with Prussia (Danzig);

(3) but their trade became so very minor precisely because they were unable to compete with the Dutch.

(4) Indeed, when the English sought to re-enter and seek out Baltic markets again, from the 1570s, having suffered the loss of their markets in the Low Countries [next day's lecture], and access to other European markets via Antwerp, they found the Dutch supremacy to be virtually invincible -- for every English ship there were 13 or more Dutch ships travelling the same routes.

(5) We shall return to this question in dealing with English trade; and again in the second term, when we resume our study of Dutch trade after 1500.

Table 1:

Estimated per capita consumption of beer, per year and per day, in litres: in various towns of the Low Countries and Germany

14th to early 17th centuries

Town	Year	Annual litres	Daily litres
BRABANT			
Antwerp	1418	210	0.575
	1526	369	1.011
	1531	369	1.011
	1567	295	0.808
	1567	296	0.810
	1568	346	0.948
	1612	259	0.710
	1618	420	1.150
	1697	274	0.750
Diest	1500	270	0.740
	1526	253	0.693
	1550	248	0.680
	1575	201	0.550
	1625	299	0.820
	1650	255	0.700
Lier	1550	310	0.849
Leuven	1372	277	0.759
	1434	210	0.575
	1472	271	0.742
	1500	275	0.753
	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
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

Town	Year	Annual litres	Daily litres
FLANDERS			
Bruges	1544	263	0.720
	1550	263	0.721
	1597	157	0.430
	1600	158	0.433
Ghent	1579	201	0.550
	1580	202	0.553
	1606	157	0.430
	1607	156	0.427
Ninove	1526	299	0.820
HOLLAND			
Alkmaar	1475	237	0.649
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
GERMANY			
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

Sources:

Richard W. Unger, *A History of Brewing in Holland, 900 - 1900: Economy, Technology and the State* (Brill: Leiden and Boston, 2001), Table III-4, pp. 90-91.

Jord Hanus, *Affluence and Inequality in the Low Countries: The City of 's-Hertogenbosch in the Long Sixteenth Century, 1500 - 1650* (Antwerp: Universiteit Antwerpen, 2010), Table 25, p. 278.

Table 2:

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

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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).

Source: Jan De Vries and Ad Van der Woude, *The First Modern Economy: Growth, Decline, and Perseverance of the Dutch Economy, 1500 - 1815* (Cambridge and New York: Cambridge University Press, 1996), p. 249.