ECONOMIC AND BUSINESS HISTORY 22/23

LECTURE 4 – WHY WAS EUROPE FIRST?

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Why Europe First?

- The Great Divergence
- English Exceptionalism
- Why not the East?

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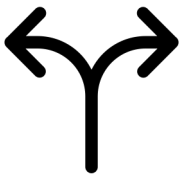
1. The Great Divergence



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The Great Divergence (GD)

pcGDP (US$ 1990)	1000	1500	1700	1820
India	450	550	550	550
China	450	600	600	600
Europ	425	797	1.028	1.234

As mentioned, after a period with no major difference (1st to 15th cent), by 1700 the GD was already ongoing

The 19th cent Globalization did not create the GD

Why?

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Western Institutions

European economies have the same **institutional blueprint**:

- Private Propriety is enshrined by law, even against executive power
- Judicial Power judicial formally independent from executive power
- Executive power limited (by parliament, property right and constitutional principles)
- The European Marriage Pattern (EMP), whereby family life was more conducive to productivity increases

per capita GDP (in USD 1990) India, China and Europe

	1000	1500	1700	1820
India	450	550	550	550
China	450	550	600	600
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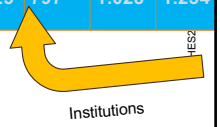

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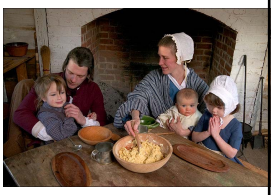
Family Values

EMP (European Marriage Patterns), by constrats with eastern values and practices (most of all in India and China)

- Marriage is a decision made by the individuals (not arranged by families)
- Marriage is neolocal (*quem casa, quer casa*)
- Marriage occurs not in the early child-bearing years, as bride and groom try to gather resources to get a livelihood or home
- Relatively low rates of matrimony (high prevalence of 'singletons')



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Family Values (2)

This creates some incentives that also increase productivity

- Independent working life before marriage (both male and female)
- Acquisition of skills or savings for increasing revenue and keeping a new house

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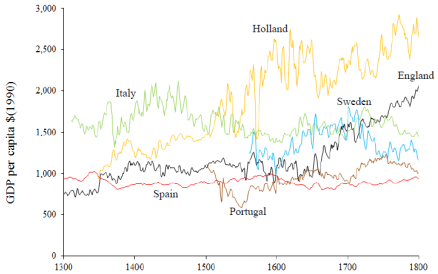
MEG: When and Where?



Sources: England (Broadberry et al. 2011); Italy (Malanima 2011); Holland (van Zanden and van Leeuwen 2012); Sweden (Schön and Krantz 2012); Spain (Alvarez-Nogal and Prados de la Escosura 2013); Portugal: (Reis et al. 2013, Palma and Reis 2014). * 3-year average; Spain: 11-year average.

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MEG: Where? When?

- Despite the European common institutional background, growth was not uniform in the continent
- Only after c. 1650 in England we observe an **economic growth** that was **sustained** Italy and Spain are not wealthier in 1800 than in 1500.
- Portugal, Hollanda and Sweden have downward and upward trends.
  - Regarding Holland, it is should be observed that Holland is one highly-urbanized province within the United Provinces, whereas the rest (Port., Sp., It.) contain both rural and urban areas
- Can we explain the exceptional case of England?

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2. English Exceptionalism

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The Agrarian Deadlock

In an Economy with stagnant productivity, what would have happened if there were a massive transfer of labour from Agr to Industry?

- This:

With reduced labour, the supply of agricultural products would decrease. As demand for agricultural products remains constant, there is an upward pressure on agrarian prices.

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The Agrarian Deadlock (2)

But, what about imports from more specialised countries?

- Not a solution:
  1. 18th-century Europe lacked the technological conditions to transport bulk agrarian goods across borders
  2. Given proteccionism and great powers' frequent wars, there no political conditions for steady imports pof essential goods

As such, each country had to grow its agriculture. By 1700, England was clearly more successful

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Agricultural Population (%)

	1705	1775	1845
England	35	29	20
France	70	65	59
Prússia	80	70	60
Spain	71	66	61
Average	64	58	50

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Source: Dennison e Simpson 2010: 149

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English Success

English success did not depend on better natural resources, as in 1600, England was below European average

Institutions are not a complete explanation either, as they only changed clearly c. 1689

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Real Labour Productivity in Agriculture (100 = England in 1800)

	1600	1700	1750	1800
England	53,1	80,4	107,7	100,0
Belgium	88,1	83,9	85,3	77,6
Holland	74,1	86,7	103,5	100,7
France	50,3	51,7	55,9	58,0
Italy	58,0	56,6	49,0	39,9
Spain	53,1	60,8	55,9	49,0
Germany	39,9	37,8	39,2	46,9
Austria	39,9	51,7	69,9	51,5
Poland	54,5	65,7	65,0	74,8
average	56,7	63,9	70,1	66,4

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Source: Dennison e Simpson 2010: 150

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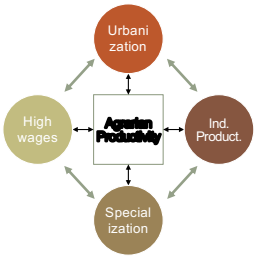
English Headstart



English (and Dutch) farm sector had more stimuli to increase productivity

High wages, higher productivity in other sectors, urbanization and specialization both stimulate and increase higher agrarian productivity

However, all these variables are simultaneously cause and consequence. We face the proReciprocal causality

Can we find some independent variables?

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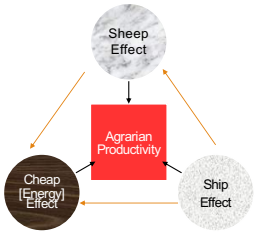
English/British Succe

"The succes of the British economy [since the 17th cent.] is due to long-haired sheep, cheap coal and (…) rising volumes of international trade"
(Allen, The British Industrial, p. 130)



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"Sheep Effect"

- Saint Thomas Moore, 1516 spoke about the 'men-eating sheep'
- Ovines all across Europe. Yet, in England the competition between pasture and grain was more intense
- Stimulating higher land productivity
  - Increase in weight and wool per animal
  - Export-oriented agriculture (supply of Italian and Flemish industries)

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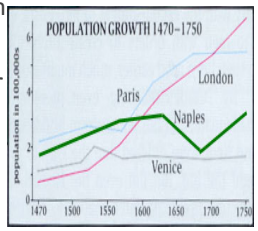
"Ship Effect"

- Trade-induced population growth of London (major port for Europeand, first, then Atlantic and then Asian trade) pushes for agricultural specialization in the countryside
- Increase in urbanization rate
- Integrated with internal markets with good transport (hence, no 'Lisbon' or 'Napoli effect')



Fonte: millwall-history.org.uk)

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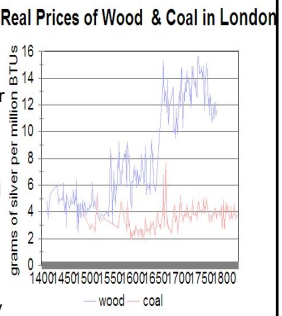
"Cheap [energy] Effect"

- Cheap Effect (or Wrigley Effect or Coal Effect)
- Urbbanization increased demand for heating and industry
- Urban demand led to the exhaustion of wood and increasing demand for (dirtier, but cheaper) coal in the 'underground forest'
- Adoption of coal saves forest, helping agriculture to obtain more room, and supports urbanization
- Also, Cheap Energy for the industry



Source: Allen (2012), op cit

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The Effect of the Effects

- With high urbanization level and cheap energy, labour productivity and wages were high
- High wages and productivity meant higher propensity for saving
- Hence, *ceteris paribus*, capital was abundant and interest rates were low
- High wages and low interests created a propensity for investing in labour-saving machines

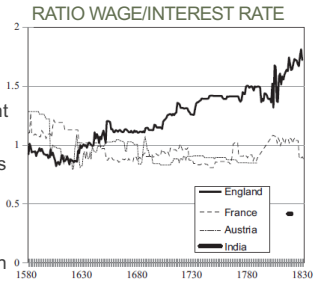

Fig. 4. Wage relative to price of capital.

Source: Allen (2012), op cit

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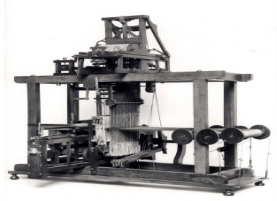
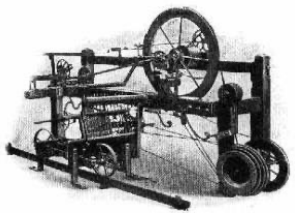
Invention



Silk loom inveted by Vaucanson, 1745, by order of the king for 'helping' the silk industry. Yet, the great manufacturers rejected, because it was more expensive than the wages it saved

Innovation



Authomatic Loom by Cartwright, 1789. Inspired by Vaucanson, Reverend Cartwright was able to create and patent a loom. Widely spread in England, because wages were higher

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High wages relative to Capital and Energy

Additionally, England had abundant (and cheap) supply for the most promising form of energy: steam!

Thus, English businesses had for more incentives to experiment with steam machines and with technology in general

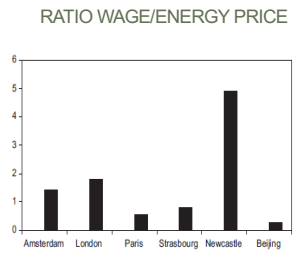

Fig. 6. Price of labour relative to energy.

Source: Allen (2012), Backward into the future: The shift to coal and implications for the next energy transition, Energy Policy, 50 (17-23).

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3. Why not the East?

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China:

By 1500, Chinese growth prospects would have appeared decent:

- Centralized State
- High Level of Urbanization
- Agricultural productivity on pair with Europe
- High Level of Human Capital

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The "Imperial System" (960-1911)

Chinese imperial dinasties performed to some extent the three Smithian state duties

- Sovereignty
- Justice
  - Meritocratic administration (national exams)
  - Public order maintained
- Public Works
  - Public Works
  - Great Canal
- This allowed for:
  - Growing urbanization and innovation
  - Urbanization c. 1600 similar to England/Netherlands
  - Integration of agricultural markets (see Gupta and Ma, tablr 11.5)
  - Public works enlarge internal market and contribute to some division of labour (Brandt, Ma and Rawski (2014: p. 52)

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Human Capital

- Urbanization meant development of Human Capital
- Chinese inventions (gunpowder, compass, printing, paper, paper money) testify good levels of Human Capital
- Numeracy (18th and 19th cent.)
  - High in China (also Japan and Formosa/Taiwan)
  - Higher than elsewhere in Asia
- Literacy (18th and 19th cent.)
  - High in China (though lower than Japan)
  - Higher than elsewhere in Asia

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王土王民

- However, institutions had serious shortcomings
- Unlike, European 'institutional blueprint', Chinese state institutions were guided by the 'Wangtu wangmin (王土王民, king's people; king's land) doctrine
- Ultimately, all land and all people belonged to the sovereignty
- Hence, no recognition of private property (absent from laws and legal thought) and no codes
- Also, no distinction between executive and judicial powers:
  - Chinese mandarins were both JUDGES and ADMINISTRATORS
- The result was a defective justice system that could not protect individual rights

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Low wages

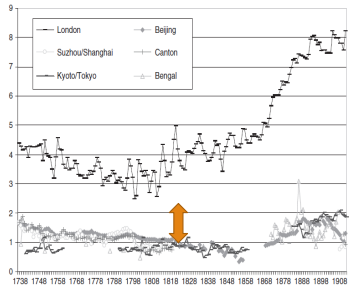

Figure 11.2 Real wages in Europe and Asia (Allen *et al.*, 2010)

China dn India: High LAND productivty but low LABOUR productivity

Wages inferior to Western Europe

Little Specialisation of agricultural labour and poor tecnhology when compared with NW Europe (Gupta e Ma 2010: p. 270)

Labour-intensive agriculture did not stimulate investment

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Interest Rates

Abundance of Labour and low price of labour made investment unprofitable

Low ages match high interest rates (Gupta e Ma 2010: 258):

- India, 17th cent.
  - Lowest values observed (7,5-9%) double England's
- China, 17th-18th
  - Average observed 12% (with 20, 30 and 40% occurring)
- High risk (untrustworthy institutions – courts, admin, …)
- Low Level of savings (low private income)

FONTE: MADDISON 2007

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International Trade

- According to Brandt, Ma and Rawski (2014) and Gupta and Ma (2010) confirm the idea that China did not benefit from International Trade (India did and hence its silver wage grew)
- Chinese external trade (Imp+Exp) pre-1800 was inferior to 1% of the GDP (Brandt, Ma and Rawski, 2014: p. 52)
- No Chinese demand for European manufactures or products (except silver)

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Demographic Problems

In the patrilocal Asian Family Model, falling wages led families to increase the quantity of labour

- Universal marriage
- High fertility (young age of brides)

This led to population growth, which contributed to further deterioration of wages, without any technological improvements

YEARS	1000	1500	1600	1700	1820	1870	1913	1950
GDPpc China/ GDPpc Europe	113%	78%	67%	59%	49%	27%	16%	10%
Pop (million)	59	103	160	138	381	358	437	547

Source: Brandt, Ma e Rwaski, 2014, p. 50

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