# **UNIT 1. Economic Growth in the Long Term**

(2478) Economic History

### Suggested citation

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 CONVOCATORIA PARA EL IMPULSO Y LA CONSOLIDACIÓN DE PROYECTOS DE DOCENCIA BILINGÜE DURANTE EL CURSO 2015/2016 (Resolución R-552/2015); 2016/2017 (Resolución R-632/2016)



- 1. Economic Growth in the Long Term
- 1.1. Introduction
- 1.2. The World Economy Dynamic
- 1.3. The Economic Leadership of the West & the Institutional Framework
- 1.4. The Pre-Industrial Economies
- 1.5. Conclusions

# References:

- ALLEN, Robert. 2011. Global Economic History: A Very Short Introduction, (Very Short Introductions), Oxford University Press, 1-26
- CLARK, Gregory. 2007. A Farewell to Alms, Princeton University Press, 4-8; 22-27
- LSE. 2015. Too much Maths, too little History: The problem of Economics.
   [https://www.youtube.com/watch?v=6rXBBqMmlP8]
- The Economist. When Did Globalization Start? 23.09.2013
   [http://www.economist.com/blogs/freeexchange/2013/09/economic-history-1]
- The Economist. What was the Great Divergence? 02.09.2013
   [http://www.economist.com/blogs/freeexchange/2013/08/economic-history-1]
- PALAFOX, Jordi. 2014. Los tiempos cambian. Historia de la economía. Tirant Humanidades. Online files.
  - [ http://www.ehvalencia.es/index.php/docencia ]



- 1.1 Introduction
- Adam Smith "The nature and causes of the wealth of nations"



# Why are some countries rich and others poor?

- Economists: causes of economic development
- Economic Historians: dynamic process of historical change

Data is required

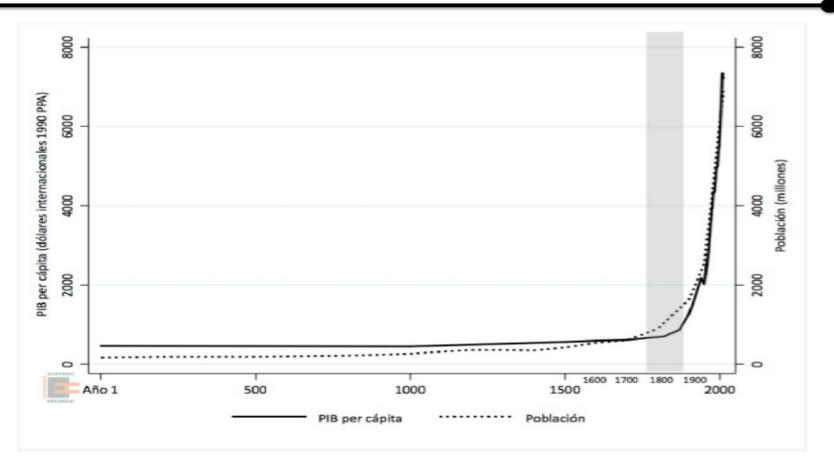
#### **UNIT 1.1. Introduction**

• "The discovery of America, and that of a passage to the East Indies by the Cape of Good Hope, are the two greatest and most important events recorded in the history of mankind ... By uniting the most distant parts of the world, by enabling them to relieve one another's wants, to increase one another's enjoyment, and to encourage one another's industry, their general tendency would seem to be beneficial." (Adam Smith, *The Wealth of Nations* [1776].)

[http://afe.easia.columbia.edu/neh/course6/activity3.html]

VALENSIA

Gráfico 1.1. PIB per cápita y población mundial durante la era común (EC), 1-2010

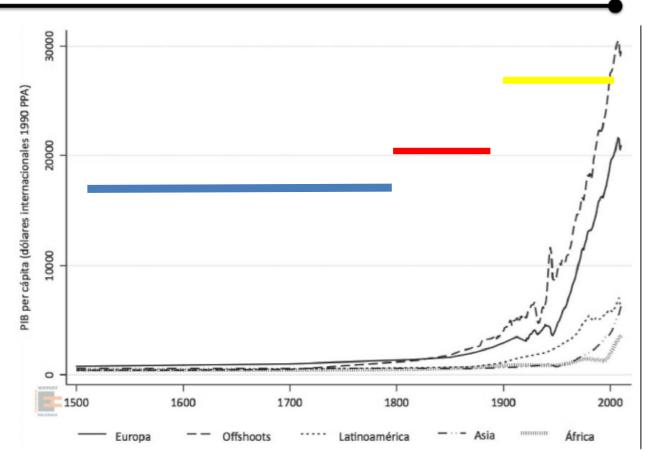


Fuente: PIB per cápita: http://www.ggdc.net/maddison/oriindex.htm y http://www.ggdc.net/maddison/maddison-project/data. htm; Población: McEvedy C. y R. Jones (1978), Atlas of World Population History, Penguin Books (Figure 6.2) y United Nations Population Division.

#### **UNIT 1.1. Introduction**

th TIRANT BEMANIBABES Valencia, 2014

Gráfico 1.2. PIB per cápita por grandes regiones, 1500-2010





Nota: Los países resultantes de la antigua U.R.S.S han sido excluidos tanto de Europa como de Asia. Fuente: PIB per cápita: http://www.ggdc.net/maddison/maddison-project/data.htm.



# LSE

# Did you know...?

please take a look!

The Economic History Department of LSE wants to encourage students and academics alike to rethink the methodologies used to explain how our world works. The following link: "Too much Maths, too little History: The problem of Economics" is a recording of the debate hosted by the LSE Economic History Department, so

https://www.youtube.com/watch?v=6rXBBqMmIP8

Three long periods since 1500

- 1500-1800: the beginning of an integrated long economy- Industrial Revolution.
  - The Americas were settled. New products.
  - Africans were shipped as slaves
  - Asia sent exotic products to Europe (spices, porcelain)
  - European manufacturing was promoted at the expense of the colonies

# Three long periods since 1500

- 1800-1898/1914: the Industrial Revolution & Industrialization
  - Britain had established as a leader in industry
  - -Economic development became an issue for Western Europe and the US
  - —Four policies:

#### Three long periods since 1500

- 1800-1898/1914: the Industrial Revolution & Industrialization
- Four policies
  - The creation of a unified national market by eliminating internal tariffs and building transportation infrastructure.
  - An external tariff to protect their industries from British competition
  - Chartering Banks to stabilize the currency and finance industrial investment.
  - The establishing of mass education to upgrade the labour force

- Four policies
  - Successful in Western Europe & North America
  - Latin America: incomplete adoption & without great success

#### 1900/1914--:

- Policies that had worked in Western Europe proved less effective in countries that had not yet developed.
  - New technology was not cost-effective in low-wage countries
- Most countries had adopted modern technology to some degree, but not rapidly enough to overtake the rich countries.
- Countries that closed the gap with Western economies had used the Big Push model using planning and investment coordination to jump ahead

- In 1820 Europe was already the richest continent.
  - 1st: Netherlands.
  - 2nd: Great Britain
- The countries that were richest in 1820 have grown the most
- The difference between the rich and the poor countries has increased: the great divergence.
- Allen (2011, 4-5): Table 1

Table 1. GDP per person around the world, 1820-2008

1820	1913	1940	1989	2008	
1706	4921	6856	16414	23742	
1838	4049	4832	16695	24695	
1101	3608	4837	16880	21190	
945	1824	2018	11129	18218	
898	2935	4534	17750	25221	
1202	5233	6838	21255	30152	
683	1695	1969	5905	8569	
688	1488	2144	7112	7904	
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	1706 1838 1101 945 898 1202 683 688	1706     4921       1838     4049       1101     3608       945     1824       898     2935       1202     5233       683     1695       688     1488	1706     4921     6856       1838     4049     4832       1101     3608     4837       945     1824     2018       898     2935     4534       1202     5233     6838       683     1695     1969       688     1488     2144	1706       4921       6856       16414         1838       4049       4832       16695         1101       3608       4837       16880         945       1824       2018       11129         898       2935       4534       17750         1202       5233       6838       21255         683       1695       1969       5905         688       1488       2144       7112	

- There are exceptions in income divergence:
  - East Asia is the most important:
    - Japan (the greatest success of 20th century)
    - South Korea
    - Taiwan
  - Another exception, although less complete, is The Soviet Union.
  - China may be repeating the trick today
- Allen (2011, 4-5): Table 1

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Table 1. GDP per person around the world, 1820-2008

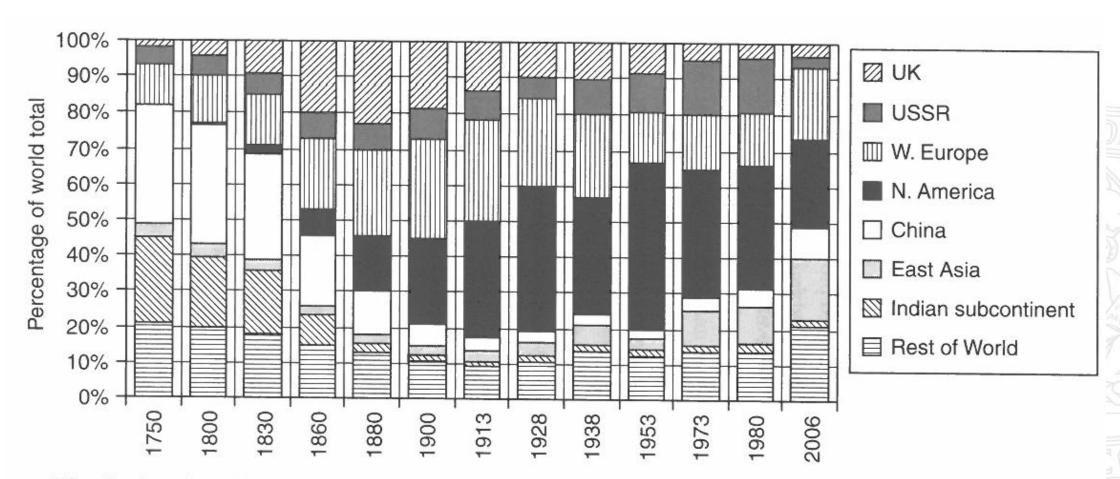
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75	1820	1913	1940	1989	2008
Other Latin American countries	636	1132	1551	4965	6751
Japan	669	1387	2874	17943	22816
Taiwan & S Korea	591	835	1473	8510	20036
China	600	552	562	1834	6725
Indian Sub- continent	533	673	686	1232	2698
Other east Asia	562	830	840	2419	4521
Middle East & North Africa	561	994	1600	3879	5779
Sub-Saharan Africa	415	568	754	1166	1387
Vorld	666	1524	1958	5130	7614

GDP measures the total output of goods and services in an economy as well as the total income generated by it. In this table, GDP is valued in 1990 US dollars so the volume of production (real income) can be compared over time and across space.

Note: Great Britain includes Northern Ireland from 1940

- Industrialization and de-industrialization have been major causes of the divergence in world incomes
  - Allen (2011, 7): Figure 1
- In 1750 most of the world's manufacturing took place in
  - China (33% of the world's manufacturing total)
  - Indian subcontinent (25% of the world's manufacturing total)
- By 1913 the world's manufacturing had been transformed:
  - China (4% of the world total)
  - Indian subcontinent (1% of the world total)
  - UK, US and Europe accounted for ¾ of the total



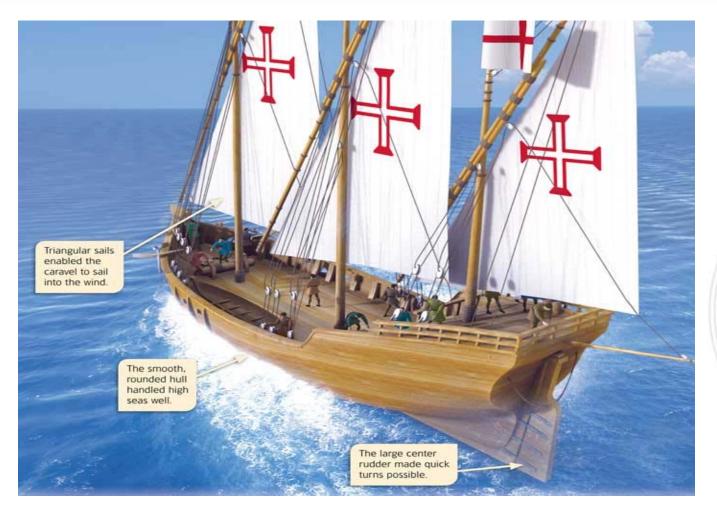
#### 2. Distribution of world manufacturing

- Industrialization and de-industrialization have been major causes of the divergence in world incomes.
  - Allen (2011, 7): Figure 1
- 1750-1880: the British Industrial Revolution was the main event in this period:
  - Britain 's share of world manufacturing increased from 2% to 23%.
  - British competition destroyed traditional manufacturing in Asia.
- 1880-1950: the world was marked by the industrialization of the US and Continental Europe (Germany).
- In 1938:
  - US (33% of the world's manufacturing total)
  - Germany (24% of the world's manufacturing total)
  - Britain lost ground to these competitors (13% of the world's manufacturing total)

- Industrialization and de-industrialization have been major causes of the divergence in world incomes
- Allen (2011, 7): Figure 1
- 1950—
  - USSR's share of world manufacturing rose until its collapse in the 1980's.
  - The East Asia miracle saw a rise in the world's manufacturing total
  - China: if China catches up with the West, the world will have come full circle.

#### 1.2.1 The First Globalization

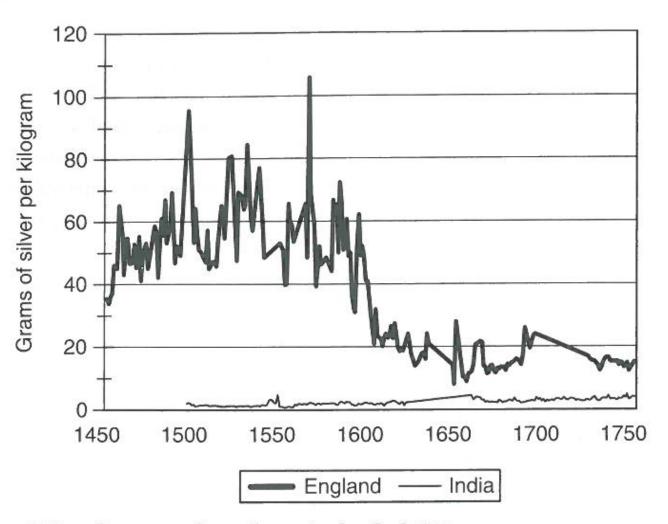
- The first phase of globalization began in the late 15th century with the voyages of Columbus,
   Magallanes and other great explorers.
- The Great Divergence began with the first globalization.
- Transportation requirement: the use of rudders instead of steering oars meant ships could be built that could navigate the globe.
  - Initial impact of full-rigid ships: XV => grain, textile
    - Relocation of Europe's manufacturing industry to northwestern Europe
  - Dramatic impact: Voyages of Discovery





https://mrgrayhistory.wikispaces.com/UNIT+13+-+THE+AGE+OF+EXPLORATION

- 1.2.1 The First Globalization
- Allen (2011, 18): Figure 5
- The reduction in the price of pepper is a measure of the efficiency gain from the all-sea route
- English & Dutch East India Companies in the 17th C ended Portugal's maritime monopoly and cut the European price by 2/3

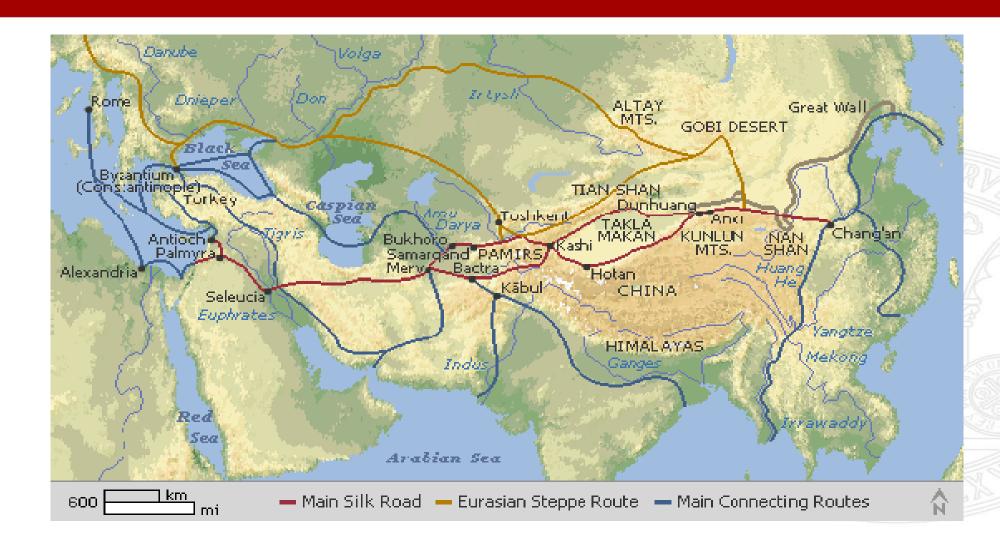


5. Price of pepper, adjusted to price level of 1600

- Did you know .... Why was pepper so important?
  - Spices were among the most prized luxury products available in Europe in the Middle Ages
  - Imported from plantations in Asia and Africa
- 1200-1400: Venice had the monopoly on the spice trade with the Middle East.
  - Venice emerged as the primary trade port for spices bound for western and northern Europe.
  - Venice became extremely prosperous by charging huge tariffs

Did you know ... Why was pepper so important?

The Silk Road was an important route connecting Asia with the Mediterranean world, including North Africa and Europe



http://www.silkroutes.net/orient/mapssilkroutestrade.htm

- Did you know ....Why was pepper so important?
- XV: the spice trade was transformed by the Age of Discovery.
  - Navigational equipment was better
  - Long-haul sailing became possible.
- 1511: Portugal was in control of the spice trade of India:
  - Main product: black pepper
- XVI over half of Portugal's state revenue came from West African gold, and Indian pepper and other spices

#### 1.2.1 The First Globalization

Portugal's Maritime Empire: Vasco de Gama: 1498 reached
 Kochi (West India). Brazil was "discovered" in 1500.

Spain's Empire: in 1492 Columbus asked
 Isabella and Ferdinand to fund a voyage to the

East Indias. America was "discovered"



#### 1.2.1 The First Globalization

• "The silver flooding into Spain paid for the Habsburg armies fighting the Protestants across Europe, provided Europeans with the cash to by Asian goods, and unleashed decades of inflation as the Price Revolution" (Allen, 2013, 19).

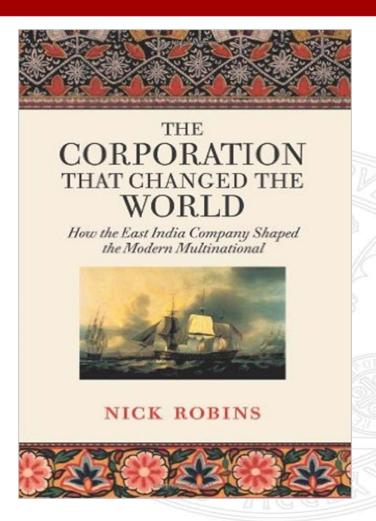
- 1490-1650: gold and silver poured into Spain from the New World
  - Inflation: 1-1.5% year: a relatively low rate for today, but rather high for the historical period

#### 1.2.1 The First Globalization

- 17th C. Northern Europeans became important imperial powers
  - The British East India Company was chartered in 1600.
  - The Dutch East India Company was chartered in 1602.
    - Both combined imperialism with private enterprise

- 1.2.1 The First Globalization
- "The Company of Merchants of London trading into the East Indies" was founded by a charter from Elizabeth I
  - following more than a year of political negotiations and raising finance.
- The charter named 218 subscribers to the enterprise
- Granted a monopoly for all English trade in any land lying east of the Cape of Good Hope.
  - Asian & Pacific territories.

- 1.2.1 The First Globalization
- 17th C. Northern Europeans became important imperial powers
  - The British East India Company was chartered in 1600.
  - The Dutch East India Company was chartered in 1602.
    - Both combined imperialism with private enterprise
- The British Empire: 17th C.
  - Active regulation: Navigation Acts
    - laws that restricted the use of foreign ships for trade between Britain and its colonies
- British and Dutch trade with their colonies drove their economies forward.
  - Cities and export-orientated manufacturing grew
  - Occupational structure changed accordingly.



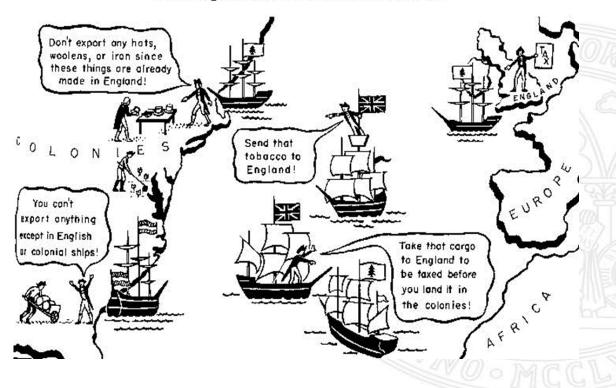




#### Mercantilism

- Economic theory (16th to 18th C.)
- Target: to increase a nation's wealth by imposing government regulation that oversaw all of the nation's commercial interests.

#### The Navigation Acts Enforced Mercantilism





#### Task 1.

Please, read the following newspaper article from The Economist, then answer the questions

• The Economist: When Did Globalization Start? 23.09.2013 [http://www.economist.com/blogs/freeexchange/2013/09/economic-history-1]

#### Questions

- 1. Stiglitz's understanding of globalization is far from the positive vision of Sen. Which vision do you support and why?
- 2. Why did the price revolution change the face of Europe?

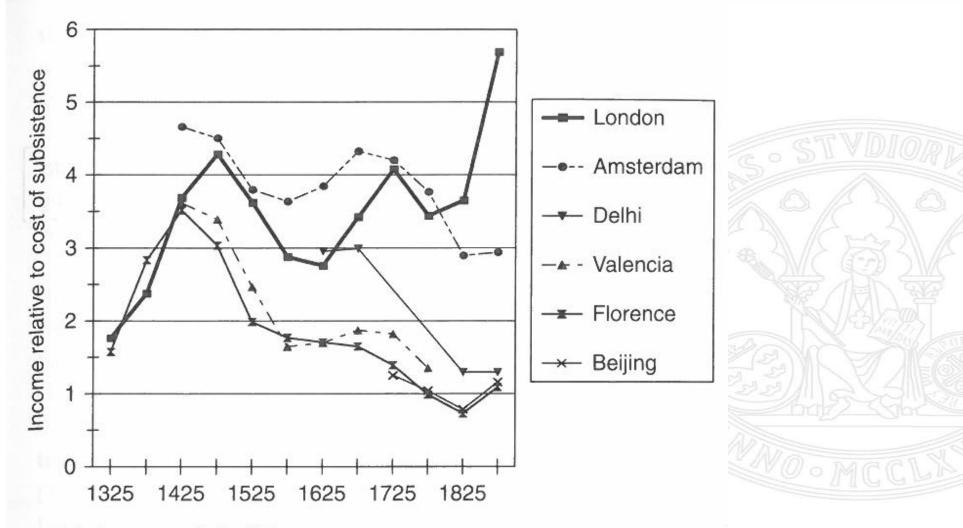
- 1.3. The Economic Leadership of the West & the Institutional Framework
- Allen (2011, p. 8): "GDP is not an adequate measure for wellbeing"
  - Health
  - Life expectancy
  - Education
- Real wages— laborers: prices of consumer goods & consumer price index
- Diet based on grain
- Non-food spending: cloth, fuel, candles.
- Allen (2011, 10): Table 2

	quantity per man per year	calories per day	protein (grams) per day
food			
grain	167 kg	1657	72
beans	20 kg	187	14
meat	5 kg	34	3
butter	3 kg	60	0
total		1938	89
non-food			
soap	1.3 kg		
linen/cotton	3 metres		
candles	1.3 kg		
lamp oil fuel	1.3 litres 2.0 Million British Thermal Units		

Note: The table is based on quantities and nutritional values for the oatmeal diet of north/ western Europe. For other parts of the world, the diet uses the cheapest available grain, and the exact quantities consequently vary.

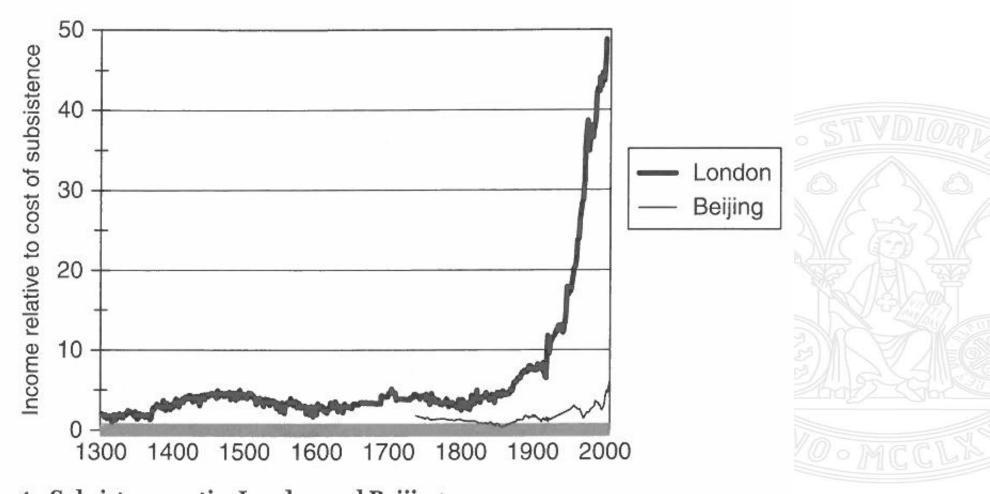


- Allen (2011, 11): Figure 3, regarding the ratio of full-time earnings to the family's subsistence costs.
- XV: Laborers earned about four times subsistence level.
- XVIII: a great divergence had occurred in Europe.
  - The standard of living on the continent collapsed
  - Valencia, Florence et al: Laborers earned only enough to purchase subsistence items (grain)
  - Amsterdam, London: laborers earned four times the average subsistence level
    - Diversification of diet: beer, bread, beef.
    - INDUSTRIALIZATION



3. Subsistence ratio for labourers

- Allen (2011, 12): Figure 4. The real wage of laborers in London from 1300 to the present and in Beijing from 1738.
- In 1820, the real wage in London was already four times subsistence level & the ratio has now grown to fifty.
- Industrialization was the result of high wages, and not just their cause.



4. Subsistence ratio, London and Beijing

#### Task 2.

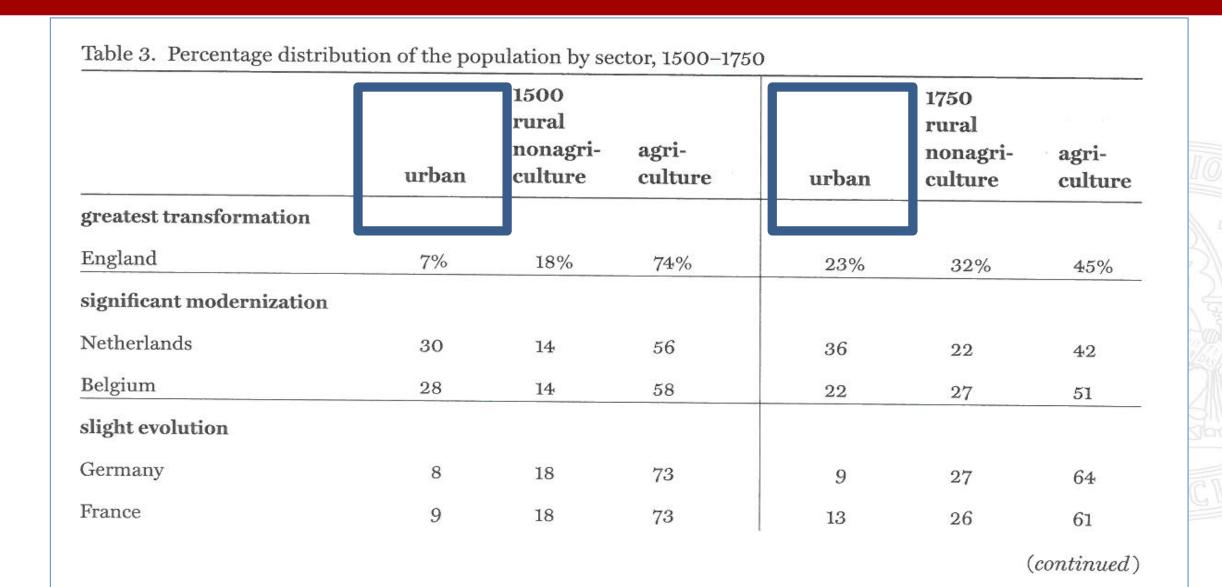
- Please, read the following newspaper article from The Economist, then do the exercises
- The Economist: What was the Great Divergence? 02.09.2013
   [http://www.economist.com/blogs/freeexchange/2013/08/economic-history-1]
- Exercises



- 1. Explain the cultural factors behind the European ascendancy.
- 2. Discuss the cultural explanation for the Great Divergence.
- 3. The Economist mentions two dates for the Great Divergence. From your point of view, which is more accurate?

- Allen (2011, 21-22). Table 3. Population of the main European countries divided into
  - Agricultural
  - Rural- Non-agricultural
  - Urban
- 1500: Italy & Spain were the most advanced economies.
  - The Low Countries were an extension of them.
- 1750: England was the most transformed country
  - People were engaged in manufacturing industries



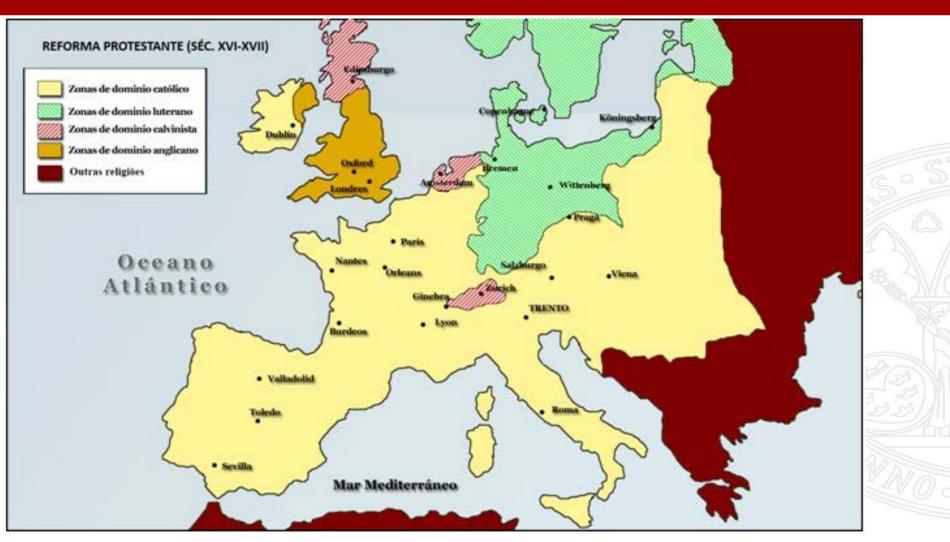


	urban	1500 rural nonagri- culture	agri- culture	urban	1750 rural nonagri- culture	agri- culture
Austria/Hungary	5	19	76	78	32	61
Poland	6	19	75	4	36	60
little change						
Italy	22	16	62	22	19	59
Spain	19	16	65	21	17	62

Success in the global economy had major implications for economic development:

#### URBANIZATION.

- Growth in urbanization and rural manufacturing increased the demand for labor (high wages).
- Growing cities and a high-wage economy put great demands on agriculture for food and labor.
- Growing urban demand also led to energy revolutions in both England and the Netherlands (coal and peat)
- The high-wage economy generated a high level of literacy, numeracy and skills development in general
  - The rise in literacy was due to high wages, and a commercial economy.
    - The reformation does not explain the rise: literacy was high in Northeastern France, Belgium and the Rhine Valley.



http://fazendohistorianova.blogspot.com.es/2015/02/reforma-e-contrarreforma.html

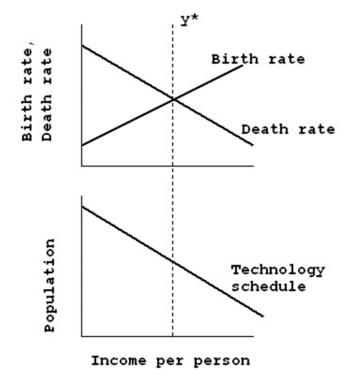
## UNIT 1.4. The pre-industrial economies

- 1.4. The pre-industrial economies
- R. Malthus. 1789. An Essay on the Principle of Population
- Malthus: two types of "checks" that could reduce the population, returning it to a level of equilibrium.
  - "preventive checks": moral restraints (celibacy, chastity, later marriages)
  - "positive checks": catastrophes (wars, famines, plagues, epidemics)
- The Malthusian model "matches" the empirical evidence for the preindustrial world (societies before 1800).

- 1.4. The pre-industrial economies
- Assumptions:
- 1. Birth rate increases with material living standards.
  - Each society has a birth rate determined by customs regulating fertility
- 2. Death rate in each society declines as living standards increase
- 3. Material living standards decline as population increases

# • 1.4. The pre-industrial economies

- According to the aforementioned assumptions, in the long run the economy will always move towards a level of real income at which birth rates equal death rates.
  - Subsistence income
- Rate of technological change is low: below 0.05 % per year.



The Malthusian Model (from Clark, Fig. 2.1)

- Clark (2007, 22). The material income at which birth rate equals death rate is called subsistence income, denoted in the figure as y\*
  - y\* is determined without reference to the production technology of the society
  - y\* depends only on the factors that determine the birth rate and the death rate.

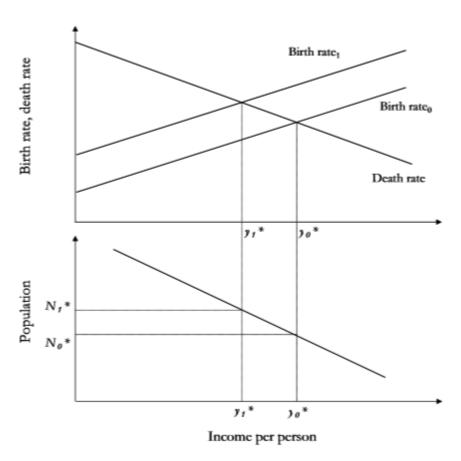


Figure 2.3 Changes in the birth rate schedule.

- Clark (2007, 26): Figure 2.3.
- Any increase in birth rates in the Malthusian world drives down real income.
- Anything which limits birth rates drives up real income.

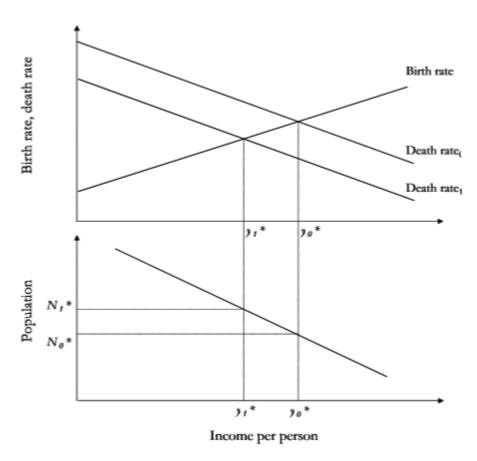


Figure 2.4 Changes in the death rate schedule.

- Clark (2007, 27): Figure 2.4.
- Anything that raised the death rate increased material living standards.
  - War, disorder, poor sanitary practices.
- Anything that reduced the death rate reduced material living standards
  - Peace, order, better hygiene, improved public sanitation





- What was the Iron Law of Wages?
- David Ricardo (1772-1823) (among others) states that all attempts to improve the income of workers are futile, and wages inevitably will remain near subsistence level
  - Natural wages depend on the cost of living.
- "Like other contracts, wages should be left to the fair and free competition of the market, and should never be controlled by the interference of the legislature" (D. Ricardo, On the Principles of Political Economy and Taxation, 1817)





Task 3

Review the Malthusian model and explain the logic behind the Iron Law of

Wages.







- 1.5. Conclusions.
- Which are the key concepts of Unit 1?
- What would you highlight as the most relevant ideas?



