UNIT 1. Economic Growth in the Long Term

(2478) Economic History
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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:

- 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](https://www.youtube.com/watch?v=6rXBBqMmlP8)
• 1.1 Introduction

Why are some countries rich and others poor?

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

Data is required
"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]
UNIT 1.1. Introduction

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

UNIT 1.1. Introduction

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.
Did you know…?

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 please take a look!

https://www.youtube.com/watch?v=6rXBBqMmIP8
1.2. The World Economy Dynamic

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:
UNIT 1.2. The World Economy Dynamic

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>
<thead>
<tr>
<th></th>
<th>1820</th>
<th>1913</th>
<th>1940</th>
<th>1989</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great Britain</td>
<td>1706</td>
<td>4921</td>
<td>6856</td>
<td>16414</td>
<td>23742</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1838</td>
<td>4049</td>
<td>4832</td>
<td>16695</td>
<td>24695</td>
</tr>
<tr>
<td>Other Western Europe</td>
<td>1101</td>
<td>3608</td>
<td>4837</td>
<td>16880</td>
<td>21190</td>
</tr>
<tr>
<td>Mediterranean Europe</td>
<td>945</td>
<td>1824</td>
<td>2018</td>
<td>11129</td>
<td>18218</td>
</tr>
<tr>
<td>Northern Europe</td>
<td>898</td>
<td>2935</td>
<td>4534</td>
<td>17750</td>
<td>25221</td>
</tr>
<tr>
<td>USA, Canada, NZ, Australia</td>
<td>1202</td>
<td>5233</td>
<td>6838</td>
<td>21255</td>
<td>30152</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>683</td>
<td>1695</td>
<td>1969</td>
<td>5905</td>
<td>8569</td>
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<tr>
<td>USSR</td>
<td>688</td>
<td>1488</td>
<td>2144</td>
<td>7112</td>
<td>7904</td>
</tr>
<tr>
<td>Argentina, Uruguay, Chile</td>
<td>712</td>
<td>3524</td>
<td>3894</td>
<td>6453</td>
<td>8885</td>
</tr>
</tbody>
</table>
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
<table>
<thead>
<tr>
<th>Region</th>
<th>1820</th>
<th>1913</th>
<th>1940</th>
<th>1989</th>
<th>2008</th>
</tr>
</thead>
<tbody>
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<td>------</td>
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<td>------</td>
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<tr>
<td>Other Latin American countries</td>
<td>636</td>
<td>1132</td>
<td>1551</td>
<td>4965</td>
<td>6751</td>
</tr>
<tr>
<td>Japan</td>
<td>669</td>
<td>1387</td>
<td>2874</td>
<td>17943</td>
<td>22816</td>
</tr>
<tr>
<td>Taiwan &amp; S Korea</td>
<td>591</td>
<td>835</td>
<td>1473</td>
<td>8510</td>
<td>20036</td>
</tr>
<tr>
<td>China</td>
<td>600</td>
<td>552</td>
<td>562</td>
<td>1834</td>
<td>6725</td>
</tr>
<tr>
<td>Indian Sub-continent</td>
<td>533</td>
<td>673</td>
<td>686</td>
<td>1232</td>
<td>2698</td>
</tr>
<tr>
<td>Other east Asia</td>
<td>562</td>
<td>830</td>
<td>840</td>
<td>2419</td>
<td>4521</td>
</tr>
<tr>
<td>Middle East &amp; North Africa</td>
<td>561</td>
<td>994</td>
<td>1600</td>
<td>3879</td>
<td>5779</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>415</td>
<td>568</td>
<td>754</td>
<td>1166</td>
<td>1387</td>
</tr>
<tr>
<td>World</td>
<td>666</td>
<td>1524</td>
<td>1958</td>
<td>5130</td>
<td>7614</td>
</tr>
</tbody>
</table>

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.
UNIT 1.2. The World Economy Dynamic

- 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
UNIT 1.2. The World Economy Dynamic

- 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
UNIT 1.2. The World Economy Dynamic

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.
Task 1.

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

• The Economist: When Did Globalization Start? 23.09.2013

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
<table>
<thead>
<tr>
<th></th>
<th>quantity per man per year</th>
<th>calories per day</th>
<th>protein (grams) per day</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>food</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>grain</td>
<td>167 kg</td>
<td>1657</td>
<td>72</td>
</tr>
<tr>
<td>beans</td>
<td>20 kg</td>
<td>187</td>
<td>14</td>
</tr>
<tr>
<td>meat</td>
<td>5 kg</td>
<td>74</td>
<td>3</td>
</tr>
<tr>
<td>butter</td>
<td>3 kg</td>
<td>80</td>
<td>0</td>
</tr>
<tr>
<td>total</td>
<td></td>
<td>1938</td>
<td>89</td>
</tr>
<tr>
<td><strong>non-food</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>soap</td>
<td>1.3 kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>linen/cotton</td>
<td>3 metres</td>
<td></td>
<td></td>
</tr>
<tr>
<td>candles</td>
<td>1.3 kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lamp oil</td>
<td>1.3 litres</td>
<td></td>
<td></td>
</tr>
<tr>
<td>fuel</td>
<td>2.0 Million British Thermal Units</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.
UNIT 1.3. The Economic Leadership of the West & the Institutional Framework

• 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
UNIT 1.3. The Economic Leadership of the West & the Institutional Framework

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.
UNIT 1.3. The Economic Leadership of the West & the Institutional Framework

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

- 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
### Table 3. Percentage distribution of the population by sector, 1500–1750

<table>
<thead>
<tr>
<th></th>
<th>1500</th>
<th>1750</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>urban</td>
<td>rural nonagriculture</td>
</tr>
<tr>
<td><strong>greatest transformation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>England</td>
<td>7%</td>
<td>18%</td>
</tr>
<tr>
<td><strong>significant modernization</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>30%</td>
<td>14%</td>
</tr>
<tr>
<td>Belgium</td>
<td>28%</td>
<td>14%</td>
</tr>
<tr>
<td><strong>slight evolution</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>8%</td>
<td>18%</td>
</tr>
<tr>
<td>France</td>
<td>9%</td>
<td>18%</td>
</tr>
</tbody>
</table>

(continued)
## UNIT 1.3. The Economic Leadership of the West & the Institutional Framework

<table>
<thead>
<tr>
<th></th>
<th>1500 rural nonagriculture</th>
<th>agriculture</th>
<th>1750 rural nonagriculture</th>
<th>agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>urban</td>
<td>19</td>
<td>76</td>
<td>urban</td>
</tr>
<tr>
<td>Austria/Hungary</td>
<td>5</td>
<td>19</td>
<td>76</td>
<td>78</td>
</tr>
<tr>
<td>Poland</td>
<td>6</td>
<td>19</td>
<td>75</td>
<td>4</td>
</tr>
<tr>
<td><strong>little change</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>22</td>
<td>16</td>
<td>62</td>
<td>22</td>
</tr>
<tr>
<td>Spain</td>
<td>19</td>
<td>16</td>
<td>65</td>
<td>21</td>
</tr>
</tbody>
</table>
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.
1.4. The pre-industrial economies


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).
UNIT 1.4. The pre-industrial economies

• 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.
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.
• 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.
• 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)
UNIT 1.4. The pre-industrial economies

- 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?