

# **Europe in the International Economy 1500 - 1800**

## **Interpretation of European Success**

Europe in World Economy 2017

# Big Questions

- Explanation for **preeminence of Europe before 1800**:
  - **probability** of global dominance before 1500?
- **Rise of the market economy**: under which **conditions** could become capitalism **dominant**?
  - **Classical** economists **view** – **growth is natural** and will **occur whenever opportunity** and **security**;
  - (VS.)
  - **Freedom** from **aggression** is necessary but **not sufficient** condition: **enterprise** is **not** to be taken for **granted**;
  - What was the **role of violence** (advantage in organization of military power; imperialism)?

# Growth as a norm?

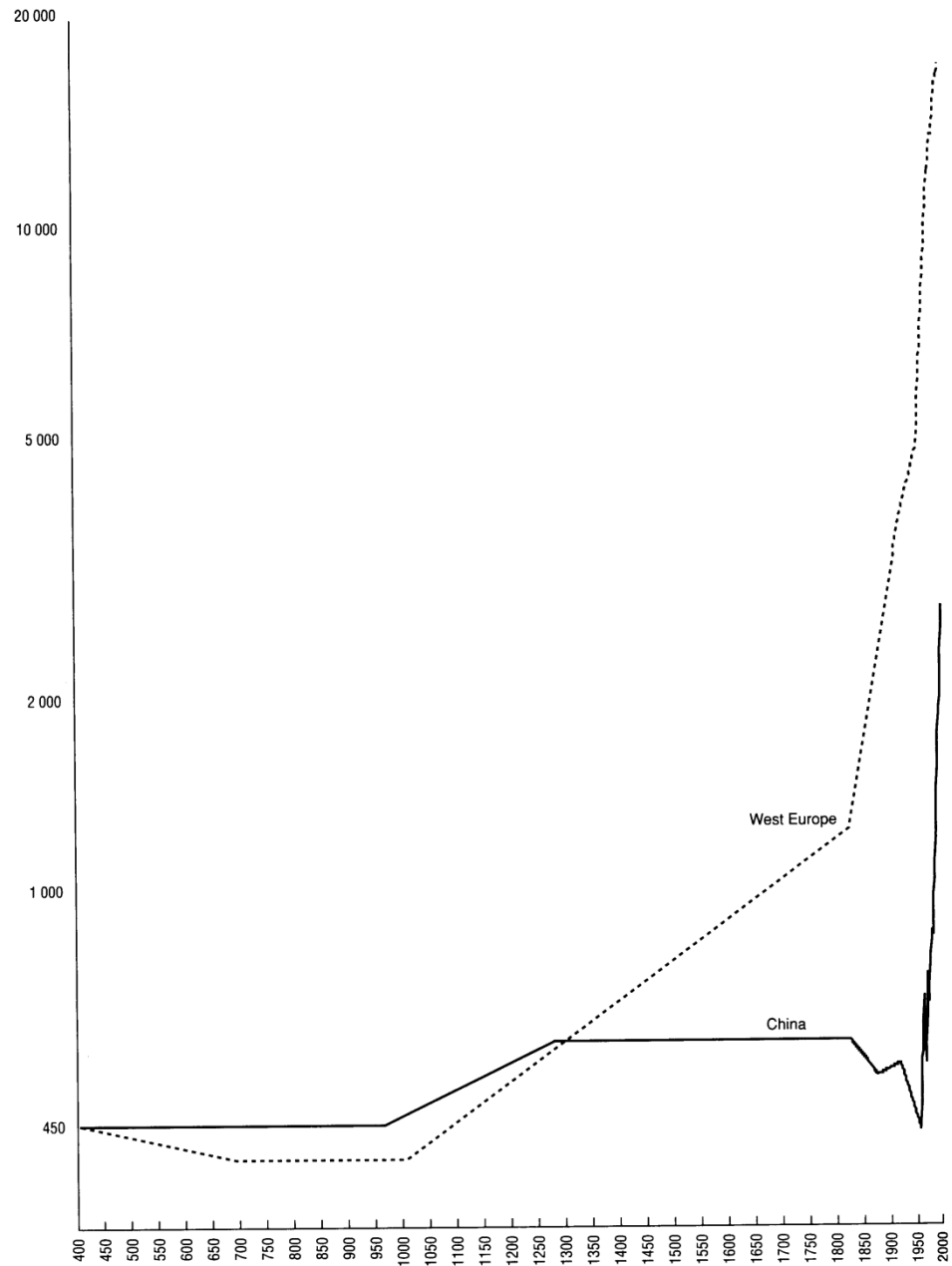
- Today: the **growth** is reflected as a **norm**;
  - but, for millenniums the **growth** has been rather excess – **stagnation** was the reality.
- **Colonialism** is usually **viewed as an external intervention**:
  - Did really **interrupted** spontaneous **development**?
  - ... was the economic development and **growth** outcome of specific self-reinforcing process which is a **unique European/Western feature**?
  - What role did the **violent expansion** played in development of **European nation state** (economic, political, military elements)?

**Table 1–9a. Growth of Per Capita GDP by Major Region, 1000–1998**

(annual average compound growth rate)

	<b>1000–1500</b>	<b>1500–1600</b>	<b>1600–1700</b>	<b>1700–1820</b>	<b>1820–1998</b>
Western Europe	0.13	0.14	0.15	0.15	1.51
Western Offshoots	0.00	0.00	0.17	0.78	1.75
Japan	0.03	0.03	0.09	0.13	1.93
Average Group A	0.11	0.13	0.12	0.18	1.67
Latin America	0.01	0.09	0.19	0.19	1.22
Eastern Europe & former USSR	0.04	0.10	0.10	0.10	1.06
Asia (excluding Japan)	0.05	0.01	–0.01	0.01	0.92
Africa	–0.01	0.00	0.00	0.04	0.67
Average Group B	0.04	0.02	0.00	0.03	0.95

Figure 1-4. Comparative Levels of GDP Per Capita: China and West Europe, 400-1998 A.D.

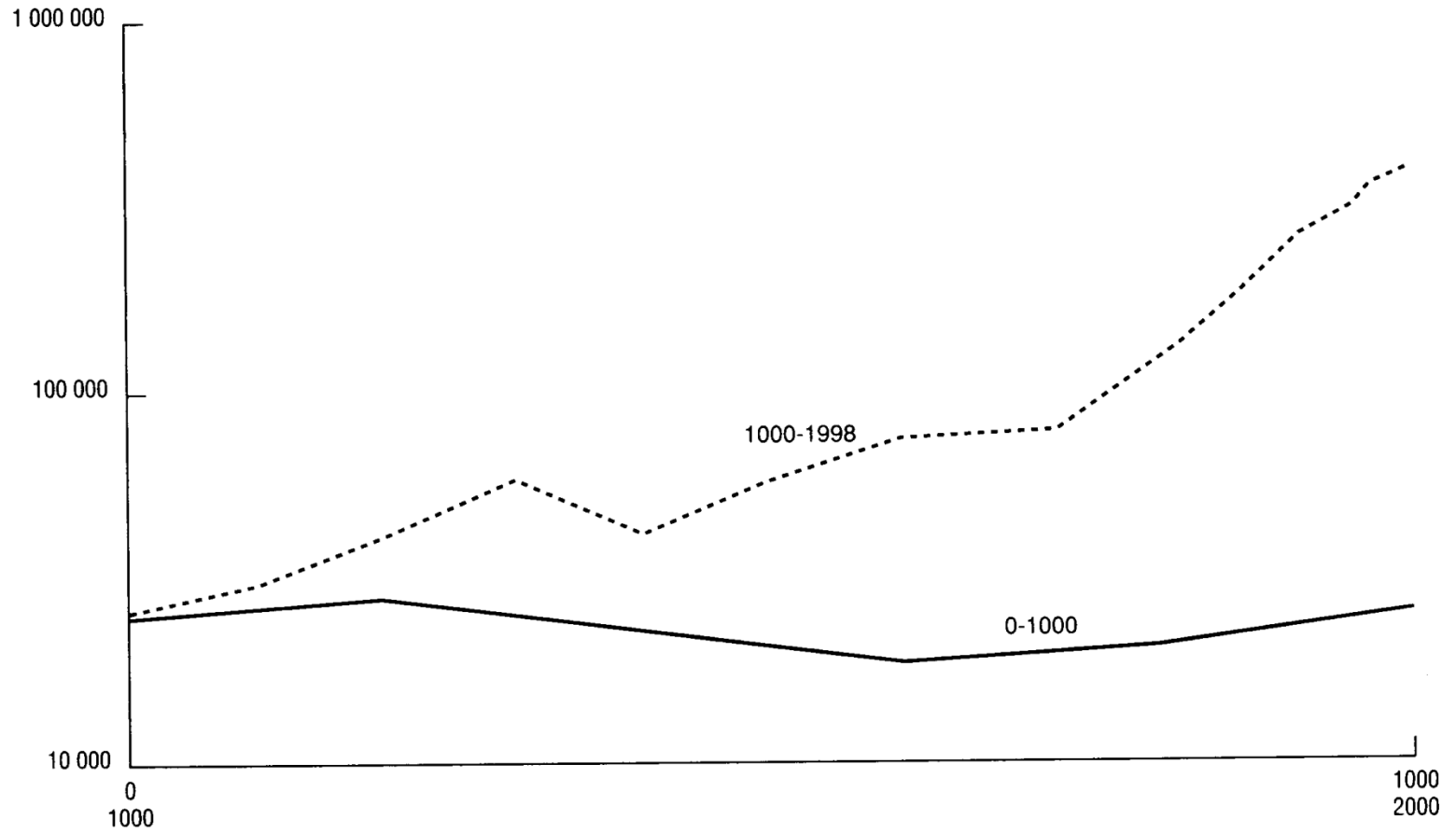


Source: Appendices A, B and C. Vertical scale is logarithmic.

## Share of World Product by Regions (%) (*Maddison*)

	<b>1000</b>	<b>1500</b>	<b>1820</b>	<b>1998</b>
<b>Western Europe</b>	8,7	17,9	23,6	<b>20,6</b>
<b>Western offshoots</b>	0,7	0,5	1,9	<b>25,1</b>
<b>Japan</b>	2,7	3,1	3,0	7,7
<b>Asia (excl. Japan)</b>	<b>67,6</b>	<b>62,1</b>	<b>56,2</b>	<b>29,5</b>
<b>Latin America</b>	3,9	2,9	2,0	8,7
<b>EE + USSR</b>	4,6	5,9	8,8	5,3
<b>Africa</b>	11,8	7,4	<b>4,5</b>	<b>3,1</b>

Figure 1-1. Population of Western Europe: Confrontation of Two Millennia  
(000)



- The acceleration of **population growth**: (*Maddison*)
  - Decline in **mortality** before 1820;
  - Sharp decline in mortality and slower decline in **fertility** after 1820.
- Year 1000: average **life expectation** at the world level was 24 years;
- By **1820**, increased to about **26 years** (24-36 in **North**);
  - since 1820 has risen to **78 years**;
- In **South** were **no improvements** between 1000 and **1820**;
  - By **2000** it had grown dramatically to an average **64 years**.
- There were **major disasters** (6th, 14th, 17th century).
- **Until** the **19th** century population growth was **repeatedly interrupted by crises**:
  - Hunger due to **harvest failure** -> waves of **infectious disease** and/or **war** -> ... **Black death** 1348 – consequences...
  - Society operated near to **subsistence levels**.



# Great North-South Divergence

Level of Per Capita GDP 1000-2000 (1990 international USD)

	1000	1500	1600	1700	1820	1998
<b>North</b>	405	704	805	907	1 130	2 1470
<b>South</b>	440	535	548	551	573	3 102

GDP of Groups A and B (billion 1990 international USD)

	1000	1500	1600	1700	1820	1998
<b>North</b>	14,1	53,2	76,1	100,0	198,0	17 998
<b>South</b>	102,7	194,0	252,9	271,8	496,5	15 727

- Europe always **thought of itself** as **different** from the **East**;
- „Oriental despotism“: (*Landes*) (Ming China 1368-1644)
  - Ruler as a **god**, different from his subjects, could do as he pleased with their **lives**;
  - **Marital aristocracy** had **monopoly of weapons** (also Japan);
    - this stifles enterprise and **stuns development**;
  - **Ordinary people**:
    - Exist to „enhance the **pleasure of the rulers**“;
    - Their duty is to pay and **obey** whoever rule them (Balkh/Bactra);
- Economic development – **Western invention** (?);
  - **Aristocratic empires**: did not think in term of **gains in productivity** – ...pressed harder;
  - Ancient Greece, Rome
    - Fell into tyrannical **autocracy** – resembled the civilization to the east;
    - Dissenters – **republican ideal**;
    - **Property rights** had to be rediscovered (Germanic tribes);

## Christian church (*Landes*)

- **Judaistic-christian tradition** in European political consciousness:
  - Reminding rulers that they held their wealth and power from **God** – on condition of **good behavior**;
  - Earthly rulers were not free to do as they pleased – **split between secular and religious**.
- Also a **custodian of knowledge**:
  - To **free clerics from** time-consuming earthly tasks – diffusion of power machinery + hiring of lay brothers;
  - Employment - attention to time and **productivity**;
  - **Monastic estates** – remarkable assemblages of **powered machinery** (1150);
- **Subordination of nature** to man – departure from **animistic** beliefs;
- Sense of **linear time** – **other** societies' (hindu) time as **cyclical** (returning to earlier stages and starting over again);

## Islam

- From Spain to the Indies (**1000-1500**);
- **Science** and **technology** surpassed those of Europe ;
- Later - denounced as heresy by religious authorities (*Landes*);
- **European expansion** – role of reconquista/crusade + „el Dorado“ /plunder + business/efficiency;

## China

- Wheelbarrow, compass, paper, printing, gunpowder, porcelain;
- **Textile**: anticipated Europe: water-driven spinning – 12<sup>th</sup>;
- **Iron** manufacture used **coal** and coke, smelting iron –11th equal to Britain's 1600;
- Knowledge **cumulative** (?) – example of **technological regression** - coal/coke smelting , iron industry ...;
- Absence of a **free market** and institutionalized **property rights** (?):
  - **state interfering** with private enterprise;
  - **Ming dynasty** (1368-1644) state attempted to **prohibit** all **trade overseas**;
- **Totalitarianism**: (*Landes*, Ming)
  - **hold** of the **state over** all **activities** of social **life** – **no private initiative**,
  - state **monopolies** comprise the great consumption staples: salt, iron, tea, alcohol, foreign trade;
  - monopoly of education, clothing regulations, housing regulations;
  - atmosphere of routine, traditionalism and of immobility;

<b>Dynasty</b>	<b>Era</b>
Qin	221-206 BC
Han	206 BC – 220 AD
Wei	386–534
Sui	581–618
Tang	618–907
<b>Song</b>	960–1279
<b>Yuan (Mongol)</b>	1271–1368
<b>Ming</b>	1368–1644
<b>Qing (Manchu)</b>	1644–1911

## Europe

- **Despotism mitigated** by law, territorial partitions, division of power between center (crown) and local authority;
- **Fortune(?)**: fall of **Rome** and the weakness and division:
  - **Dream of unity** persisted to the present, fragmentation generally seen as a great misfortune (EU?);
  - **Fragmentation** strongest brake on oppression;
  - Europe safe from single-stroke conquest:
    - **Mongols 13<sup>th</sup>**;
    - **Turks – twice** at the **walls of Vienna** (1529, 1683);
- **Europeans** reasonably **secure** were able to pursue their own advantage;
- Period of **population increase** and economic growth up to 1350:
  - Black Death – 1/3 or more died – **till 1500** period of **rebuilding**;
  - Increase in **wages**, rationalization of **agri** (animal production) -> raw materials for industry, higher **demand**;
  - **West** – specialization, cities, nuclear family vs. **East** – political oppression, second serfdom; (*Findlay, O'Rourke*)

Specifically European phenomenon – **semi autonomous city**;

- Cities **whenever** sufficient **surplus** to **sustain population** of nonfood **producers** (rulers, soldiers, craftsman);
- ...nothing like the **commune**: **governments of the merchants** with exceptional civil power – *Landes*: gateways to freedom;
- **Migration** to the cities improved also income of those **left behind** – linkages to serf emancipation;

Why did **rulers grant rights**:

- Trade, crafts, markets brought **revenue and power** (*Tilly*);
- Free farmers and townsmen (**bourgeois**) were natural **enemies** of the **landed aristocracy** and would **support the crown**)
- **Tax** (on property, flows) vs. **kind** ... (violence; credit - *Tilly*);

§ NUREMBERGA §

S. Annis.

S. Sebaldus.





Table 2–3. **Population of 31 Biggest West European Cities, 1500–1800**  
(000)

	1500	1600	1700	1800
			<b>Italy</b>	
Naples	150	281	216	427
Venice	100	139	138	138
Milan	100	120	124	135
Florence	70	70	72	81
Genoa	60	71	80	91
Rome	55	105	138	163
Bologna	55	63	63	71
Palermo	55	105	100	139
			<b>France</b>	
Paris	100	220	510	581
Lyon	50	40	97	100
Rouen	40	60	64	81
Bordeaux	20	40	50	88
			<b>Low Countries</b>	
Antwerp	40	47	70	60
Ghent	40	31	51	51
Brussels	35	50	80	74
Bruges	30	27	38	32
Amsterdam	14	65	200	217
			<b>Germany and Austria</b>	
Nuremburg	36	40	40	27
Cologne	30	40	42	42
Lubeck	24	23	n.a.	23
Danzig	20	50	50	40
Augsburg	20	48	21	28
Vienna	20	50	114	231
			<b>Iberia</b>	
Granada	70	69	n.a.	55
Valencia	40	65	50	80
Lisbon	30	100	165	180
Barcelona	29	43	43	115
Cordoba	27	45	28	40
Seville	25	90	96	96
Madrid	0	49	110	167
			<b>Britain</b>	
London	40	200	575	865

Source: de Vries (1984), pp. 270–77.

## Medieval agricultural revolution innovation rather than invention:

- Wheeled **plow** with deep cutting iron share (Germanic tribes);
- **Opened** rich river valleys – turned land reclaimed from forest into fertile fields;
  - Heavy clayey soil resisted the Roman wooden scratch plow;
- **Animals** to match – oxen, horses (land-rich, labor scarce economy);
- **Intensive cultivations** – shift from two-field to a three-field system of **crop rotations** (winter grain, spring grain and fallow)
- Ability to support **livestock** → supply of fertilizer → **ascending cycle**;
- Windmill – key to successful **pumping** of **fens** and **polders** (made **Holland**);



# Commercialization of Agriculture

- Why did **peasants** in **West** begin to work for the **market** while rest of Europe no sooner than in 18<sup>th</sup> and 19<sup>th</sup>? (vs. DCs 20th, 21th)
- Decision **market vs. subsistence**: (*Aldcroft*)
  - Small local market - sharply **declining demand curve**:
    - Lower price can be compensated by **specialization and productivity** growth - after certain point commercialization is a **self-reinforcing** process;
    - **Subsistence** – no scale, no learning, no technological change;
  - **West: cities** and **employment outside agriculture** - bigger markets and technological change (**ToT** in favor of agriculture);
  - **Institutional structure** of society... (*Aldcroft*)
    - Less developed market have higher **transaction costs** (transport, tolls, middlemen, information) – preference to **subsistence** or provision locally;
    - **Transition costs** of transformation from autarky to commercial farming (switch back costly);
    - New forms of **dependence** – **middlemen** (supply capital in return for buying crops in advance);

*Table 1.2 Rough estimates of the number of mouths fed by 100 people working in agriculture 1500/20–1800*

	1500/20	1600	1700	1800
England/Wales	132	143	182	248
Belgium	173	160	192	233
Netherlands	177		219 <sup>a</sup>	277
France	138	145	158	170
Italy	133	143	122	129
Poland	100	101	101	105
Spain	114	130	122	129

*Note:* <sup>a</sup>1670.

*Sources:* England/Wales and France: Wrigley (1987,187); for other countries, see Van Zanden (1998a).

*Table 1.1 Estimated crop yields and yield ratios for 12 countries in about 1800 (crop yields in hl per ha)*

	Crop yields				Yield ratios			
	Wheat	Rye	Barley	Oats	Wheat	Rye	Barley	Oats
England	20.3		29.3	32.5	11.3		12.7	9.0
Ireland	19.9		31.2	32.9				
Netherlands	18.9	15.4	27.7	28.8	11.2	7.5	14.2	11.1
Belgium	19.6	20.8	25.3	25.1	11.5	12.2	14.1	13.2
France								
north	14.4	12.1	14.0	15.4	6.6	5.5	6.9	8.5
south	10.1	9.7	12.3	14.5	6.2	5.5	6.6	7.1
total	12.2	10.8	13.5	15.2	6.4	5.5	6.8	8.2
Italy	6.9	7.6	10.1	9.9	4.1	4.4	5.0	5.2
Spain	7.0	4.0	9.0	9.5	4.5	2.5	7.0	
Germany								
4 dept.	13.7	13.2	20.4	25.8	7.1	7.1	6.7	8.0
total	13.7	12.5	13.5	17.0				
Austria	12.8	12.9	19.2	19.3	4.0	4.0	4.6	5.2
Sweden					6.0	5.9	5.9	5.0
Russia					3.0	3.1	3.1	3.6

*Source:* Van Zanden (1998a).