# WE from Adam Smith to WWI

## Contet of the lecture

- A. formation of WE
- B. development prior to Adam Smith
- C. from Adam to WWI
  - 1. global tendencies
  - 2. development

# Formation of WE

### A. Formation of WE

- no exact date of formation
- beginning of WE at the end of the 19<sup>th</sup> century
  - minimum connections among inhabited areas
  - existence of international markets of goods, labour and capital
- BUT increasing cooperation/connections even earlier



Development prior to A. Smith

### B. Prior to Adam

- Prehistory
  - trade already in Neolithic trade routs
- Antiquity
  - Troy
  - Phoenicians
  - height Greeks and Romans
  - Eastern civilizations more developed than Europe (according to certain authors)
  - the fall of Rome at the end of 4<sup>th</sup> century ⇒ decline in trade

#### The Middle Ages

- revival of trade only in 10th century
- regional specialization
- terrestrial **transport** more expensive than maritime transport
- overseas discoveries ⇒ price revolutions (prices 3x 4x)
- considerable increase of trade from 15<sup>th</sup> to 18<sup>th</sup> century
  - importance of overseas discoveries
  - the most dynamic sector
  - spice and (later) ordinary things

#### leadership

- China at the beginning of 15<sup>th</sup> century technological superiority
- Portugal + Spain + North Italy
- Netherlands ⇒ (FR?)
- GB

# Comparison of China and Western Europe (1400-1989)

Year	GDP per capita (\$ in 1985 prices)		Population (mil)		
	Western Europe	China	Western Europe	China	
1400	430	500	43	74	
1820	1 034	500	122	342	
1950	4 902	454	412	547	
1989	14 413	2 361	587	1 120	

# From Adam to WWI

# C. From Adam to WWI general trends

• 1776

#### general trends

- balance among powers -> minimum conflicts
- gold standard
- self-regulated market for a large number of products
- liberal state
- considerable technological progress
- GB as superpower Pax Britanica

# C1. From Adam to WWI tendencies and development

#### 1. tendencies

- demographic
- technological
- political
- social
- institutional

### 2. development

- economic growth
- price stability
- foreign trade
- international flows of capital
- globalization???

# Demographic changes

- demographic transition
  - ⇒ population growth
- migration
  - massive outflow of population from Europe to newly settled lands USA, parts of GB Empire, Latin America ⇒
    - decrease of population pressures in Europe
    - newly settled lands gain necessary labour force
- improvement in the quality of human capital

# Illiteracy rate in France

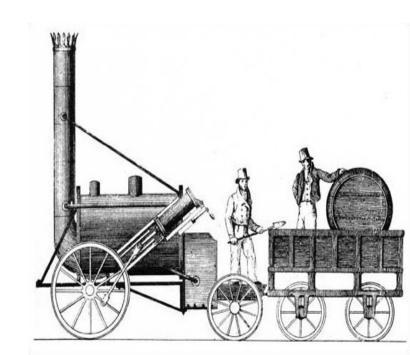




**Generations** 

## Technological changes

- fundamental changes in technologies
  - water water energy as well as transport rout
  - steam engine cheaper source of energy and transport
    - James Watt
    - Stephenson's steam locomotive ⇒ railways ⇒ ↓ costs
    - similarly ship transport
  - telecommunications telegraph, telephone, ...
  - later electrical energy
- industrial revolution—YES/NO
  - transition from handmade manufacturing
    - To machine production in factories
  - GB = so called "workshop of the world"
    - around 1830 ½ of world ind. production
- Suez Canal (1869)
- Panama Canal (1915)



# Length of railway network, 1840-1910 (in thousand miles)

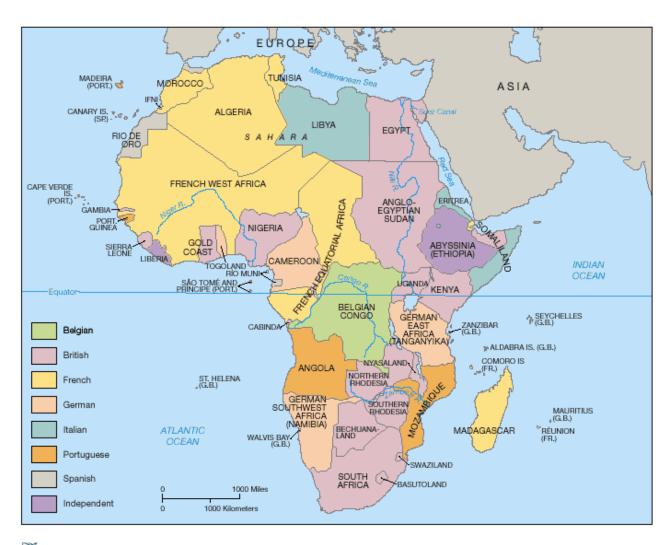
	1840	1870	1910
Europe	2,6	65,4	212,1
North America	2,8	55,4	265,8
Latin America	0,1	2,4	60,7
Asia	_	5,1	59,5
Africa	_	1,1	23
Oceania	_	1,1	19,3
The World	5,5	130,5	640,4

## Political changes

- military conflicts
  - period delimited by Napoleonic Wars and WWI
- 1815 1914 balance among powers
  - only Crimean War
  - and FR X Prussia 1870-71
- BUT early 20<sup>th</sup> century Weapon Races
- stability thanks to the policy of GB
  - so called splendid isolation = GB ouside of military alliances— abandoned at the beginning of 20<sup>th</sup> century

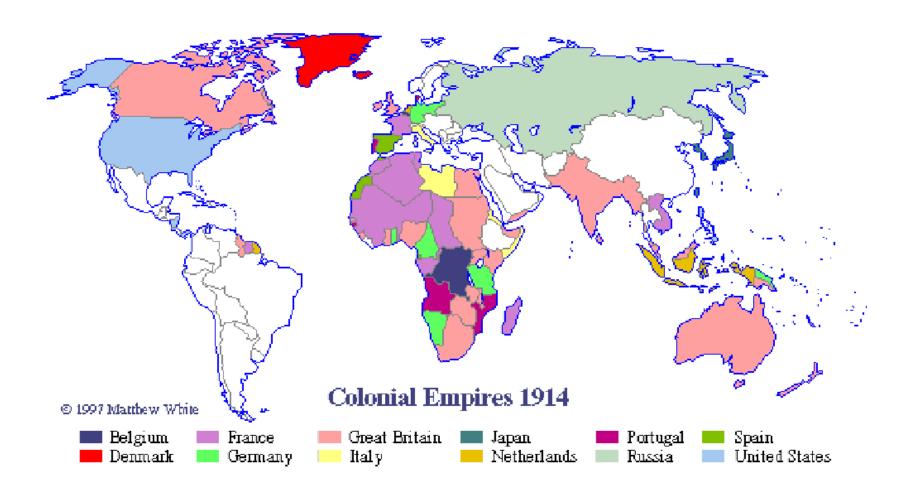
- BUT regional and civil wars
  - Civil war in USA
- + revolution 1848
- monarchies ⇒ transition to democracies
  - the role of state keep marginal no interventions to economy BUT considerable differences among countries
- 1 colonies (Africa and Asia)
  - reasons for colonialism: economic x political

## Partition of Africa in 1914



Africa, 1914. Before 1800, Africa was controlled by numerous African states. By 1914, all of Africa, with the exceptions of Ethiopia and Liberia, was under the control or oversight of European powers.

# **Colonial Empires 1914**



## Social conditions

- very hard life in the countryside before the industrial revolution x myths about good simple life
  - û population ⇒ û workers ⇒ **social claims**
  - + very severe situation of working force at the beginning of 19th century
  - û working hours ineffective
- since 1870  $\circlearrowleft$  working hours + holiday + sick benefit  $\Rightarrow \circlearrowleft$  working hours and  $\updownarrow$  health and quality of LF
- other factors of improvement
  - economic growth
  - legislation
  - migration
  - trade unions
  - politics

## Institutional changes

- from feudalism to capitalism
  - free sale and purchase of property
  - private ownership

### legal system

- protection of proprietary rights Roman law
- development of accountancy
- development of financial institutions
  - better access to loans and insurances

### concentration of production

monopolistic tendencies?

# C2. From Adam to WWI tendencies and development

#### tendencies

- demographic
- technological
- political
- social
- institutional

### development

- economic growth
- price stability
- foreign trade
- international flows of capital
- globalization???

## Economic growth

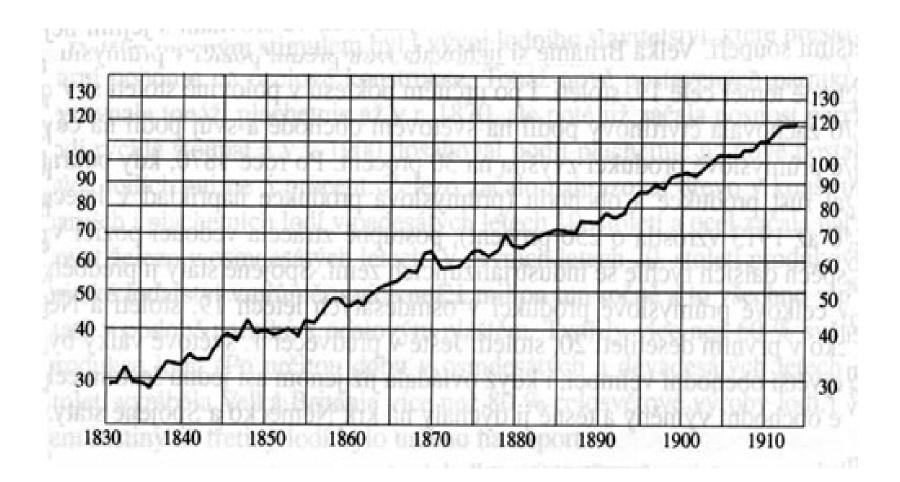
#### extensive

- demographic changes (population growth)
- increasing capital accumulation

#### intensive

- institutional changes
- technological changes
  - cheaper energy, better communication and transport
- changes in production
  - rational organization of business
  - better managerial techniques
  - 1 work discipline
- division of labour in connection with foreign trade
- ⇒ ⇒ û labour productivity

# GDP of Europe 1830 –1914 (1899-1900 = 100)



## Cyclical development

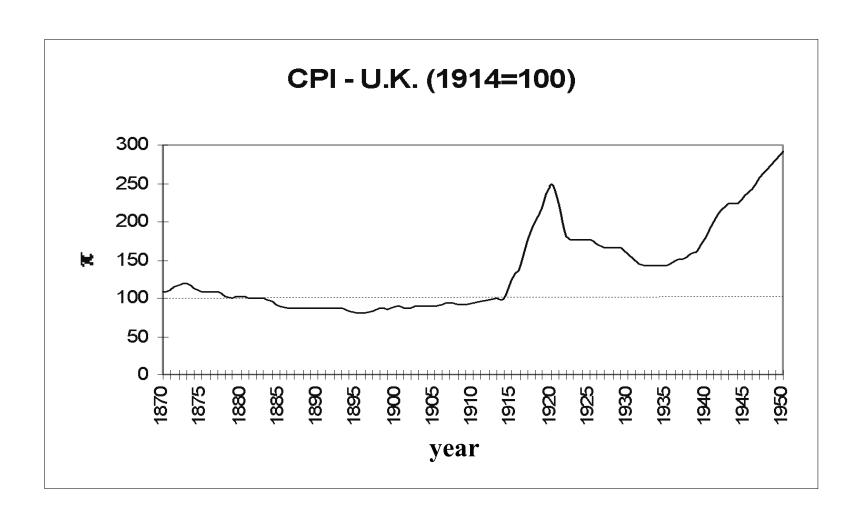
- before industrialization local crises
  - bad weather ⇒ crop failure 1590s, 1630s, 1780s
    - in most cases short-term impacts û mortality (aged and young persons) ⇒ rapidly replaced BUT considerable political consequences
    - longer period of higher mortality diseases or invasions (Mongols) ⇒ better conditions for survivors: more land ⇒ lower rents + lack of LF ⇒ high wages
- industrialization + û international trade ⇒ interconnected cylical fluctuations
  - spread of crises through trade routes
  - 1825-23, 1837-38, 1846-47, 1857, 1866, 1873, 1882, 1893, 1900-01, 1907
  - !!! ↓output ⇒ ↓ prices

## 1873 – 1<sup>st</sup> deep international depression

- the most deep and widespread in the entire previous history
- financial panic in Vienna and New York
- spread to most of other industrial countries
- in GB referred as "Great Depression"
- foreign trade blamed by industry ⇒ demand for protectionism
  - same situation in agriculture

## Stability of prices

• price level reliant on the gold supply – gold standard ⇒ stability



## Foreign trade

- phases
  - strongly protectionistic ⇒ free ⇒ moderately protectionistic
- long-term foreign trade
- before WWI unprecedented interdependence
  - similar situation after WWII
  - benefits for all participants

# Average growth in the volume of trade, 1850-1913 (in %)

	1850 - 1873	1873 - 1913
Britain	4,2	2,6
USA	5,8	4,1
North-West Europe	5,1	5,2
Rest of Europe	4,7	2,9
Moderate climate countries	5,9	4,3
Tropical countries	3,4	3,1
East Asia	3,7	3,8
Total	4,6	3,3

## The beginning of the century

- protectionism
  - mercantilism
  - duties as fiscal revenues (easy collection)
    - both export and import duties (primarily on luxury goods)
- trade with colonies
  - colonies ⇒ mother countries: raw materials
  - mother countries ⇒ colonies: final goods
    - but low purchasing power

## Napoleonic Wars

- Continental Blockade = trade embargo against GB
- Russia
- victory of GB ⇒ superpower = the largest producer, trader, investor, fleet, colonies, ...
  - center of trade = Europa (2/3)

### •GB in 40s - turnover

- abolishment of Navigation Acts and Corn Laws
- + effort for free international trade
- critics that favourable for GB

## After 1860

- Cobden Chevalier treaty (1860) free trade between GB and FR
  - GB abolished duties except those on luxury products (fiscal function)
  - FR permitted he import of British textile + ↓ duties
  - Most favoured nation clause = possibility of extension to other nations
  - ⇒ 60s FR with BE, DE Customs Union, IT, CH, Scandinavian c., ES, NL, AT and PT only Russia not involved
  - + nations among each other ⇒ interdependence ⇒ û free trade
  - disadvantage necessity of its renewal
- + gold standard
- + **\$\Pi\$ transportation costs** (railways, steamers)
- + GB support of free trade

### Turnover - Prussia

#### Prussia X FR 1871

- Prussia: winner, requirement of enormous reparations
- □ û amount of AU□ û prices + û development of factories □ overproduction □ crisis in 1873 worsen for DE
- + financial panic
- ⇒ in DE free trade blamed ⇒ û protectionism
- + other reasons...

### Other reasons

#### agriculture

- important Prussian export commodity
- in 70s inflow of cheap grain to Europe from USA, Russia, India, ...
- steam technologies railways
- huge impact on Prussian exporters

## Share in British grain market

	German	USA
	countries	
1856-1860	25,9 %	18,0 %
1871-1875	8,2 %	40,9 %
1875	2,9 %	60,2 %

# World grain production, 1831/1840-1888 (in million bushels)

	1831-40	1851-60	1871-80	growth (in	1881-87	1888
				%)		
Germany	50	70	94	34,3	98	103
Russia	110	130	224	72,3	250	258
Italy	60	75	115	53,3	105	141
Spain	58	70	114	62,9	133	170
Europe total	712	857	1126	31,4	1231	1296
USA	78	137	338	146,7	440	415
Canada + Australia	8	17	48	182,4	74	82
India + others	108	187	282	50,8	375	478
Total	906	1198	1794	49,7	2120	2271
Average annual growth in		1,4	2		1,68	1,73
%						

- + German Historical School
- + pressure groups
- ⇒ Bismarck imposed duties (1879 a 1889) ⇒ û prices of grain

# Average prices of grain in England and Prussia per Imperial Quarter

	England	Prussia	difference
1871-5	54 8	50 4	-4 4
1876-80	47 6	45 3	-2 3
1881-5	40 1	40 7	+0 6
1886-90	31 5	37 3	+5 10
1891-5	27 11	35 11	+8 0
1896-1900	28 7	34 8	+6 1
1901-5	27 11	35 2	+7 3

## Other countries

#### followed DE's example

#### France

- 1881 new tarrif law (industry)
- more important **Meline tariffs** from 1892
- in 1910 additional increase of tariffs on chemicals, electric appliances and rubber products

#### Italy

- unification of the country

#### AUS-HUN

returne to ultraprotectionism

#### • USA

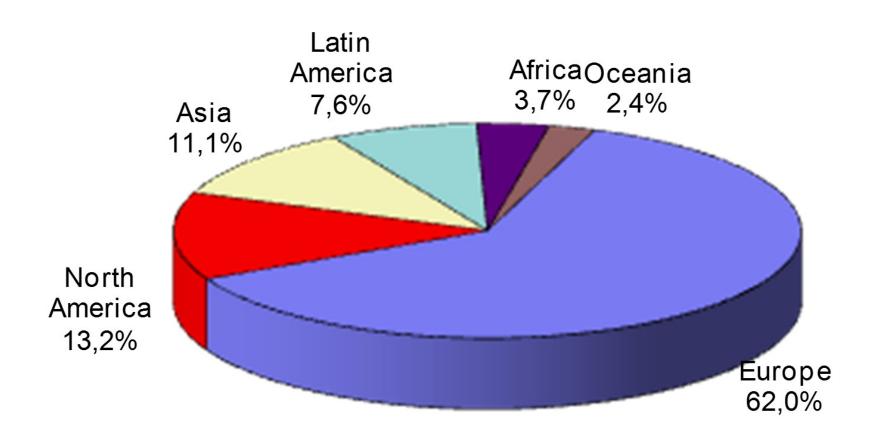
strong protectionism after the Civil War

#### Russia

- never abolished the duties
- in 1891 enactment of practically prohibitive duties

- BUT in total only **moderate 企 protectionism** 
  - GB X but without considerable results
  - BE, N and DK still liberal
  - WE still highly interconnected
    - EX/GDP
      - GB, FR, DE 15 20%
      - smaller countries such as BE, NL and Scand. higher
      - + USA and Latin America also involved
    - 1913 the largest trader still GB (2. DE, 3. USA)
  - GB no trade with modern products such as chemicals, eappliances, ...
- territorially the most of trade realized in Europe

## Regional distribution of international trade in 1913



## International flow of capital

- capital flows already after 1700 + û GB's I after the Napoleonic Wars
- huge outflow of C to abroad approx. 50 years before WWI
- before WWI no restrictions on capital flows
  - first globalization of the financial markets
  - ⇒ strong convergence of interest rates on bonds
- international financial center in London

#### Reasons

- Gold standard
  - stability of the system
  - credibility of economic policy
- new financial institutions and instruments (investment banking)
- **technological progress** (telegraph, transatlantic cabel 1866, telephone)
- **flexibility of economies** + less powerful pressure groups
- + certain regulations = requirements to spread info about companies (in GB) + e.g. accountancy

## Structure of investments

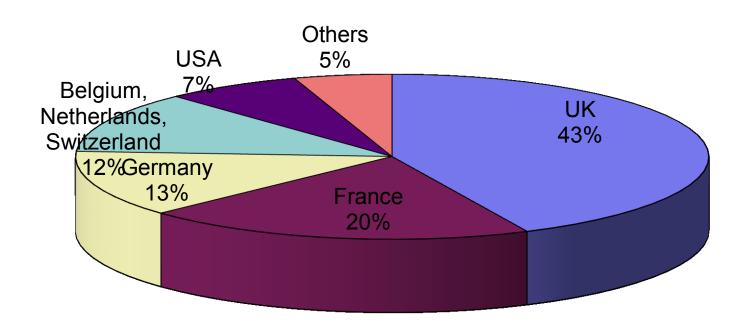
- bonds to finance railways and infrastructure + long-term government debt
  - e.g. GB = 1913 foreign investments
    - 30% in government and municipal securities
    - 40% railways
    - 10% extraction of raw materials (mainly mining)
    - 5% public services
    - ⇒85% very transparent and tangible actives
- majority under the **form of obligations** (not assets)
- portfolio investments more important than FDI

### Investors

## principal international investor - GB

- in 1914 43% share in total investments (more than 4 bill. pounds) = 2 times more than FR
- 1914 GB + FR + DE = 3/4 of investments

## Foreign investment by country of origin in 1914



## Direction of investments

- **GB** ↓ EU, û USA + û û Dominium
  - to ex-colonies same language, culture, legal system and accountancy

#### • FR X GB

- initially construction of railways in Europe
- later influence of policy = Russia as ally x DE⇒ direction of investments (1914 = 28%)
- + areas with similar culture and where its influence was high = IT, ES

# British foreign investments into various regions, 1830-1914 (in %)

	1830	1854	1870	1914
Europe	66	55	25	5
USA	9	25	27	21
Latin America	23	15	11	18
The Empire - India	-	-	22	9
Dominions	2	5	12	37
Other regions	_	_	3	9
Total in USD million	536	1 266	3 750	20 000

### Globalization ??

- situation before WWI similar to the current one
  - ☆ foreign trade + foreign I + migration -> interdependence of WE
  - + supported by û markets + new technologies (changes in transportation and energy sources)

#### X differences

- number of countries not involved
- speed of transport and communication less convenient for the function of companies at global level
- contemporary financial markets substantially larger absolute flows of capital
- before WWI limited teritorial and structural direction of capital

## Thank you for attention