

# European Economy in 19th century (until WWI)

Europe in International Economy  
2015

# Great Britain – early being nation

- Purchasing power of the **lower classes** → **ability to buy beyond necessities**
  - great English **middle class** – merchants, shopkeepers, manufacturers, bankers, men of law;
- **Mechanization** → higher **productivity** → higher **wages** → increased **demand** (for manufactures) → **larger market and specialization...**
  - English have **grown rich by consuming** – ran against the folk wisdom – thrift and abstemiousness („habit of French peasants“, *Aldcroft*); (*Calicoes, Corn Laws*);
- Result: **aimed** at a large **national and international market** and **focused** on **standardized** (manu) **goods** of **moderate prices** – the kind that lent themselves to **machine production**;

*Table 1.5 Estimates of the development of GDP per capita at constant prices in six European countries 1500–1820 (UK 1820 = 100)*

	1500	1570	1650	1700	1750	1820
UK	45–49 <sup>a</sup>	45 <sup>a</sup>	54 <sup>a</sup>	68	81	100
Netherlands	60	60	98	97	95	89
Belgium	55	65	63	66	72	74
Italy	75–76 <sup>a</sup>	62–66	71	71	62–66	62
Spain	0	55–61	49–62	50–56 <sup>a</sup>	51–53	61
Poland	51–60	48–56	48–55	40–46	34–37	46
Unweighted average	57–60	55–58	63–67	65–67	66–67	72
Coefficient of variation	0.17 <sup>b</sup>	0.14	0.25	0.25	0.29	0.26

*Notes:*

<sup>a</sup> Intrapolated.

<sup>b</sup> Excluding Spain.

Italy – first estimates date from 1380 and 1450.

*Source:* Van Zanden (1997).

*Table 2.3 British share of some European products (per cent)*

	1800	1830	1870
Pig iron production	29	45	58
Raw cotton consumption	65	66	57
Coal production	85	78	63
Railway mileage open	—	90	24

*Source:* Bairoch (1976a, 129).

*Table 2.4 Regional percentages of total trade 1830–60*

	Europe	North America	Exports to South America	Asia	Africa	Oceania
<b>1830</b>						
from UK	46.7	25.5	11.5	12.8	2.5	1.0
from continent	82.0	6.6	6.3	3.8	1.3	—
<b>1860</b>						
from UK	34.3	16.6	12.0	25.7	3.2	8.2
from continent	82.0	5.8	5.8	3.1	3.2	0.1

*Source:* Bairoch (1976a, 88).

## France – strongest on the continent...

- 1815 **lost sugar colonies** (Caribbean), prosperity of **Atlantic ports undermined**;
- **Markets** for **cheap machine** produced goods **dominated by GB**;
- Large **peasant class**, **rooted** to land;
- New industries: **lacked coal**; **transportation** underdeveloped;
- **Slow to adopt** the **new cost-reducing technology** or expand into new product markets
  
- Alternative explanation (*Aldcroft*) - **Different route**;
  - **Less necessary** to **sell goods abroad** to feed population;
  - **GB preempted overseas markets** for cheap mass production – **France** did well to concentrate on **quality goods** (skills, taste, designs – edge);
  - Much **slower population growth**;
  - Industrial **labor** more **productive** than in **GB**: high-quality production; low productivity **agriculture** kept down overall figures;
  
- **Quality engineering**, **construction and architecture**, **road system** and canal network;
- **Railway building** on large scale since 1840s (1850: 2,5k km, 1870: 17,5 k) – helped develop iron and engineering industries, investment banking skills
- **Outside Europe** very **minor role** compared to GB;

## Germany

- Soon to grow into leading **industrial** power – until 1870 collection of independent states (**Custom Union**);
- Overseas trade through NED;
- GER territories in terms of **modern industrial sector overtaking** France **1850-1870** (2x coal, iron 1,1; steel 1,8x); large scale **state intervention**;
- **Railway building**: leading sector – outperformed FRA (1851-1869 10-20% of total investment) – creating engineering industry out of nothing;
- Despite expanding mercantile fleet, **foreign trade played a lesser** part (92% exports to Europe);
- Major source of overseas **emigration** from 1840 onwards;

## Belgium

- **Resembled GB most closely**: tradition in **metallurgy** and **textile**, plenty of coal, iron, easy international transport (+ early rail), GB example, neighboring FRA and GER – government inclined to favor business;
- First install **coke smelting**, paper, glass, output coal, iron, machinery...
- Railway network closest to GB level; **export** per head even higher;

# Switzerland

- **No coal**, no iron ore, no access to the sea, surrounded by large protectionist countries;
  - Assets: **skilled** educated **labor force**, some capital accumulations, plenty of **water power**, **trading tradition** (could not feed itself in grain; city belt);
  - **Cotton spindles** (10x 1814-1870), machine building and engineering next;
  - **Conquered** foreign **markets with high quality products** (cotton, embroidered goods, lace, silk, watches);
  - High degree of **division of labor** (decentralized production) - **instead of a factory**;
- Unique – **concentration** on **overseas markets** (**neighbors** unstable and **protectionist**); 1845 **64% went overseas** (**US main** market), only 36% to Europe;
  - **Free trade drive** in **Europe** since **1860** (still 37% extra Europe);
  - Per head export greatly exceeded GB, BEL;



# United States

- **Starting** as a colonial type **economy** -> expanding **primary exports** at a fast rate -> **1870 major industrial power**;
- **1870** – still essentially **agrarian state**, but **shrinking employment** and output -> **manufacturing**;
- **Leading industry: Cotton textile** (value added 16k USD in 1805 -> 930k in 1820 -> 48,4mil in 1860), coal, iron mining;
  - **Using GB technology** first – **innovations**, different form of **factory organization**;
- **US technology** leading in wood-working machinery, high-pressure steam engines,
  - **American system of manufacture** – the **mass production** of **composite articles** using **interchangeable** parts;
- By **1870 US 23% of world industrial output** (despite civil war);
- **Rich in land** and other **NR** as well as in **capital** – but **short of labor**:
  - Tend to **go for innovations** - saving labor, capital (physical, human) intensive economy;
- **Europe** main market for US **primary product exports**, creating **ELG in critical period**;

**Table 2–24. Structure of Employment in the Netherlands, the United Kingdom and the United States, 1700–1998**  
(per cent of total employment)

		<i>Netherlands</i>	<i>United Kingdom</i>	<i>United States</i>
1700	Agriculture	40	56	n.a.
	Industry	33	22	n.a.
	Services	27	22	n.a.
1820	Agriculture	43 <sup>a</sup>	37	70
	Industry	26 <sup>a</sup>	33	15
	Services	31 <sup>a</sup>	30	15
1890	Agriculture	36 <sup>b</sup>	16	38
	Industry	32 <sup>b</sup>	43	24
	Services	32 <sup>b</sup>	41	38
1998	Agriculture	3	2	3
	Industry	22	26	23
	Services	75	72	74

a) 1807; b) 1889

*Source:* Maddison (1991a), p. 32 for 1700; Maddison (1995a), p. 253 for the United Kingdom and the United States 1820–90; Netherlands 1807 and 1889 from Smits, Horlings and van Zanden (2000), p. 19; 1998 from OECD, *Labour Force Statistics 1978–1998*. Agriculture includes forestry and fishing; industry includes mining, manufacturing, electricity, gas, water and construction; services is a residual including all other activity, private and governmental (including military).

# European Imperialism

- NWE forced (**exploitation**) its way into **untouchable territories** (China 1842+1860, Japan 1853+1868);
- Territorial **imperium** in others (India, Java);
- Atlantic triangular system (slave trade);
- **Deindustrialization** (China, India);
- Columbian **exchange** of the **life forms** (**utilization**):
  - American: maize, cocoa, potato, tomato, tobacco, coca, hardwoods, rubber;
  - Euroasian: sugar, coffee, bananas, cereals and animals (horse, cattle, sheep, chicken, pigs);
- **Law of migration** (**development**)- people go to **improve their situation**, enhance the **bargaining power** of those **left behind**, while in their new home they create **wealth** to **ship back**;

**Table 2–22a. Levels of GDP Per Capita in European Colonial Powers and Former Colonies, 1500–1998**  
(1990 international dollars)

	<b>1500</b>	<b>1700</b>	<b>1820</b>	<b>1913</b>	<b>1950</b>	<b>1998</b>
Britain <sup>a</sup>	762	1 405	2 121	5 150	6 907	18 714
France	727	986	1 230	3 485	5 270	19 558
Italy	1 100	1 100	1 117	2 564	3 502	17 759
Netherlands	754	2 110	1 821	4 049	5 996	20 224
Portugal	632	854	963	1 244	2 069	12 929
Spain	698	900	1 063	2 255	2 397	14 227
China	600	600	600	552	439	3 117
India	550	550	533	673	619	1 746
Indonesia	565	580	612	904	840	3 070
Brazil	400	460	646	811	1 672	5 459
Mexico	425	568	759	1 732	2 365	6 655
United States	400	527	1257	5 301	9 561	27 331
Ireland <sup>b</sup>	526	715	880	2 736	3 446	18 183



FREEDOM FRATERNITY FEDERATION



Public Library of the City of Boston



IMPERIAL FEDERATION—MAP OF THE WORLD SHOWING THE EXTENT OF THE BRITISH EMPIRE IN 1886.

STATISTICAL INFORMATION FURNISHED BY CAPTAIN J. C. COLOMB, M.P. FORMERLY R.M.A. BRITISH TERRITORIES COLOURED RED

# India

- **GB India most populous** part of empire, second trade partner (US);
- **EIC** (monopoly in India 1813; China 1833; India to GB gov. 1858);
  - **Primary** concern always to make **money for shareholders**, not to govern a colony – taxing and trading – chief servants extremely wealthy;
  - **Bengal** (1757 Plassey)– tax collection rights, **enormous burden** on peasants;
- Drain of the annual sums sent to GB by **EIC impoverished the country**, reduced its savings and investment, government was required to **borrow** to meet its obligations- enlarged external debt;
  - Indian **taxpayers had to meet the cost of the GB army** and of its various wars;
- **GB brought internal peace, unified** the country **administratively**, established the **rule of law**;
- **Destruction of ancient handicrafts**, particularly the production of **cotton textiles** by **import** of **GB** machine-made goods;
  - GB cotton sold to India rose from 800k in 1814 to 1bil yards in 1870 ;
  - Weavers able to survive by **turning to silk good**, producing **luxury good**;
  - 1837 cotton imports only 6% of Indian consumption, 10% 1850; **transport from the ports still primitive, village craftsmen kept local customers – dual economy** persisted for long time;
- **Indian exports** – primary commodities, 1820-30s **indigo** and **opium** (indigo declined 1830, opium leading with 33% of exports); other **rice, sugar, seeds, tea**, later **jute**;

**Table 2–30. Comparative Macroeconomic Performance of India and Britain, 1600–1947**

	<i>1600</i>	<i>1700</i>	<i>1757</i>	<i>1857</i>	<i>1947</i>
<b>Per capita GDP (1990 int. dollars)</b>					
India	550	550	540	520	618
United Kingdom	974	1 250	1 424	2 717	6 361
<b>Population (000)</b>					
India	135 000	165 000	185 000	227 000	414 000
United Kingdom	6 170	8 565	13 180	28 187	49 519
<b>GDP (million 1990 int. dollars)</b>					
India	74 250	90 750	99 900	118 040	255 852
United Kingdom	6 007	10 709	18 768	76 584	314 969

## China

- **Never** turned into **colony**, **hostile to foreign imports**;
- **Traditional flow** of **silver** into china to **pay for tea, porcelains, silks** turned into **reverse flow** of specie out of china from **1820s**;
- **Opium** smuggled in → **China attempted bloc the trade**, war **1830-42**;
- **GB enforced opening** of **ports**, extraterritorial rights for merchants and cession of **Hong-Kong**;
  - **France** and **US similar privileges** – much extended after **second opium war** – treaty of Tientsin **1860**;
  - **Tea increasingly dominant** in China's export;

## Japan

- **Shut itself** for centuries – **forced to open** its territories in the **late 1850s** – treaty of **1866**:
  - **Not to rise tariffs above 5%** while giving foreigners **extraterritorial rights**;
- Meiji restoration 1868;
  - **Liberal reforms** (general opinion; men of ability; all classes equal; property rights; 1890 constitutional monarchy); modernization (industry, transportations);
  - Economy was **transformed** with **remarkable speed** form 1870s;





THE NEMESIS STEAMER DESTROYING CHINESE WAR JUNKS, IN CANTON RIVER.

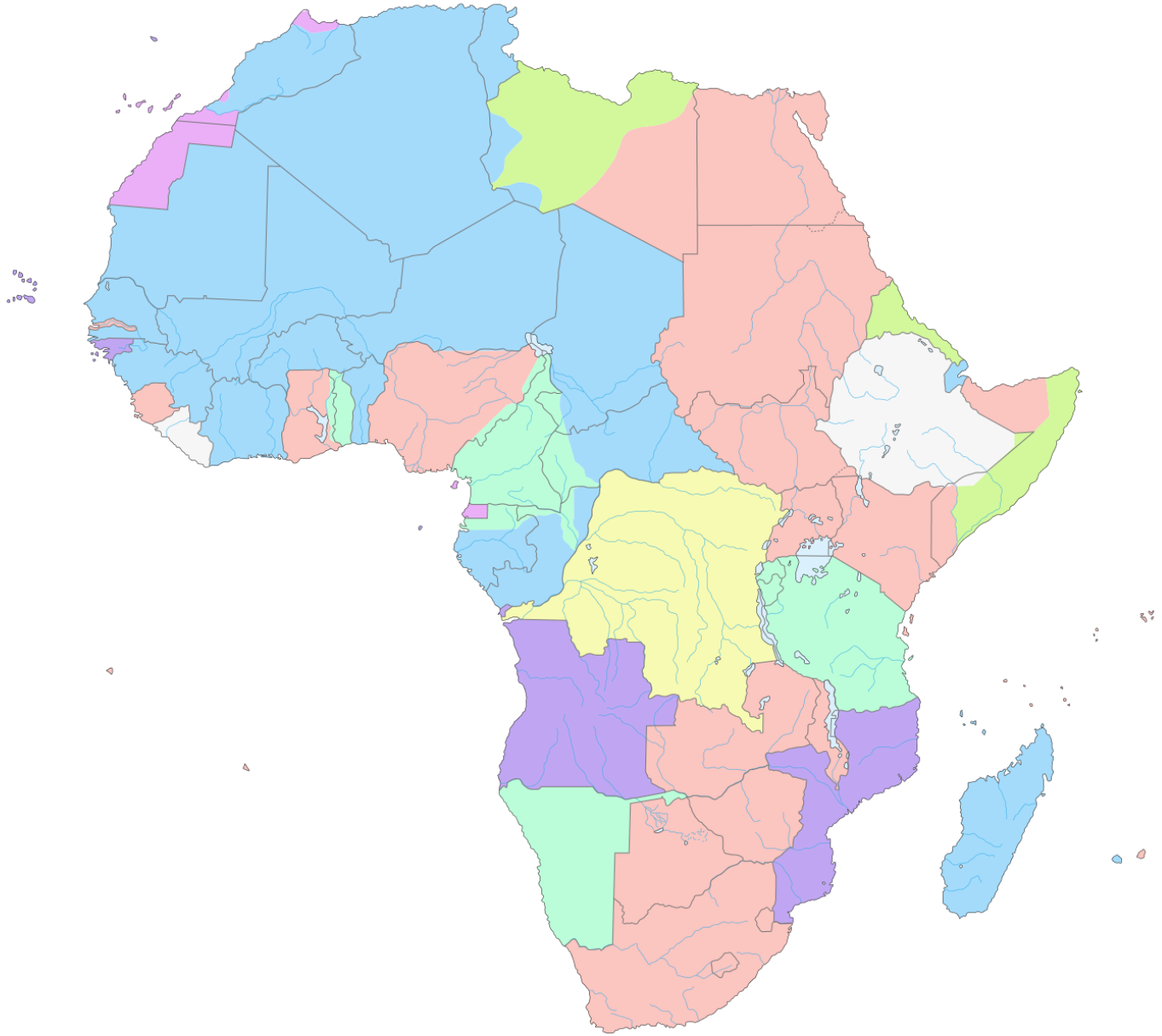
(From a sketch in the possession of the Hon. East India Company.)

# Egypt

- **Mohammed Ali** (since 1805, left 1848) - attempted to turn Egypt into a modern economy;
  - Extensive **irrigation** and canal works – forced labor;
  - Range of **industrial plants** was set up with **European experts**; founded schools and colleges – **sending students** to Europe;
- Ali **forced** peasants to **sell** their **crops** at a **fixed low price** – reselling to finance his **industrial ventures**;
- Continued by Ali's successors – built roads, railways, steam shipping; Egypt contributed to Suez;
- Most successful was growing of **long stapled cotton** - production increased 8x 1820-1860 (but textile industry failed);
- Despite partial success, **no break through** into modernity;
  - Incomes remained low, the modern sectors remained enclaves;
- **Causes: lack of skill**, ability among **managers** and workers, unveiling coerced labor, **corruption**, costly **imported machinery**, delayed spare parts, lack of **coal**;
- 1860s and 1870s **serious debt** – forced to accept **external fiscal control**;

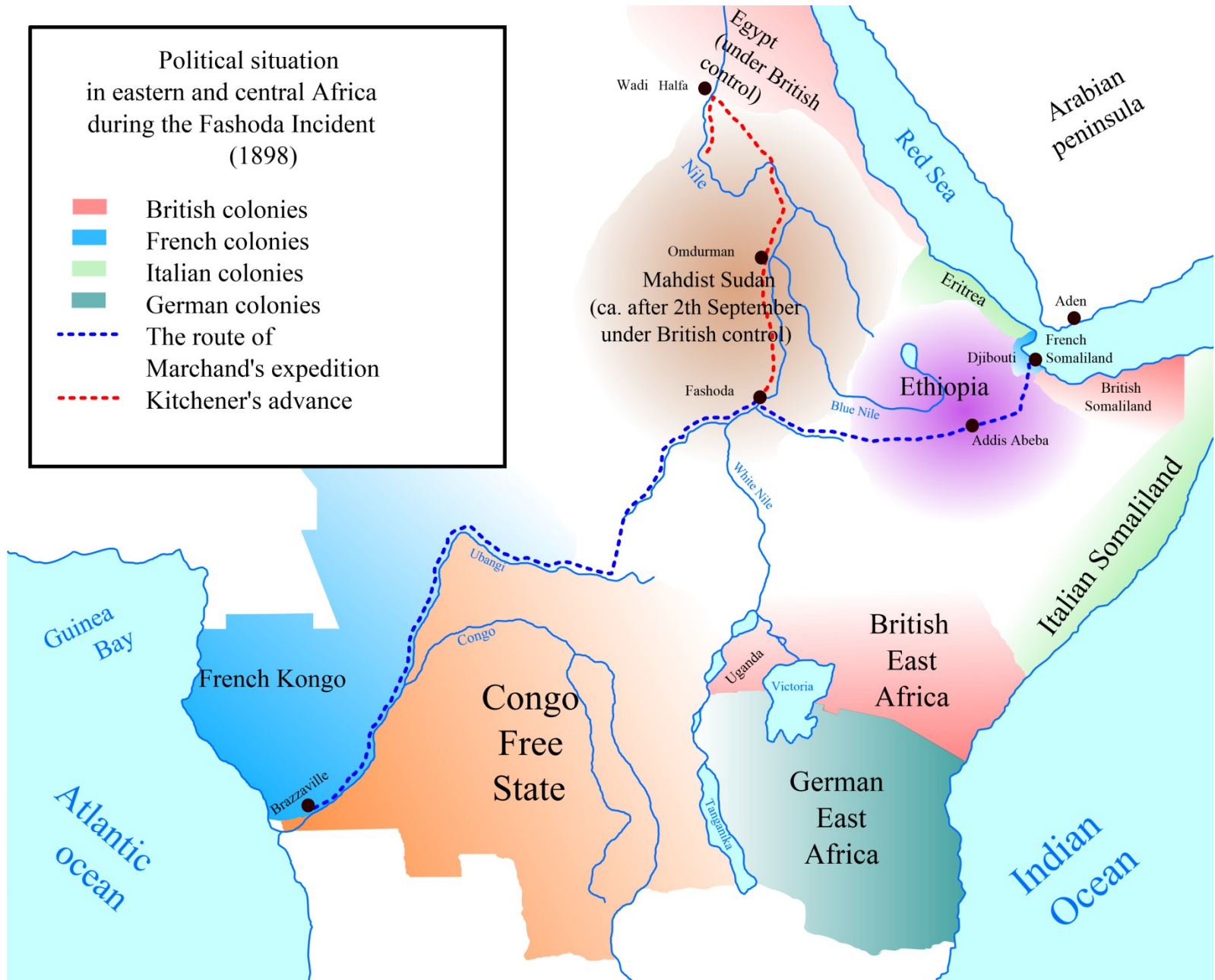
## Ottoman Empire

- **Classic example** of economy **starting** out from a **level comparable** with that of **Europe** in **1800**:
  - Not only failed to keep up, but experienced **decline** and **deindustrialization**;
- Some **traditional craft** industries **survived** – silk robes, pearl goods, damascene arms, morocco leather, but others – **cotton textile**– destroyed by European industry;
- Political and economic weaknesses – **commercial treaty** with **GB 1838** opened **country** to **foreign imports**, **limited duties** and **privileged** foreign **merchants** – exempt from provincial tariffs;
  - **1856** monopoly for **coastal traffic** granted to **foreigners**;
  - Incompetent and **corrupt administration**;
- Contact with Europe **encouraged** the **production** of **primary goods** – cotton, tobacco for export;
- From **1854** **government forced** to **take** up **foreign loans** – 1860 it privileged the foreign run Ottoman bank;
  - By **1869** **empire owed 76mil pounds** abroad –**received** only about **half** – very **little** used on **productive** enterprises;
  - **Growing foreign control** over Turkish administration;
- Similar story **Persia**: **forced open** by **treaty with GB 1841** – exports stagnated between 1830-1860



Political situation  
in eastern and central Africa  
during the Fashoda Incident  
(1898)

- British colonies
- French colonies
- Italian colonies
- German colonies
- The route of  
Marchand's expedition
- Kitchener's advance



# First World War

- In a generation, Europe **threw away** a legacy that had taken centuries to accumulate (*Aldcroft*);
- **Output** and **export** levels well **down** on **those of 1913**, even by mid1920, **markets lost** for ever;
- European **share** of international **trade** down from **59 to 48%** (1913-1920); **US more** manufactured output than **Europe combined**;
- Later in period: increasing importance of **totalitarian powers** – **USSR** and **GER** (USSR, GER, ITA, JAP increased share in industrial production from 22% to 38% 1929-1938);
- **US failed** to assert its **leadership**;
- Problem: **longer borders** in **Europe** as a consequence of establishment of new countries (A-H, RUS empires) → **nationalism** and **protectionism**;

## Relative manufacturing shares (% of world output)

	1913	1929	1938
USA	35,8	43,3	28,7
USSR	5,5	5,0	17,6
GER	15,7	11,1	13,2
UK	14,0	9,4	9,2
FRA	6,4	6,6	4,5
ITA	2,7	3,3	2,9
BEL	2,1	1,9	1,3
JAP	1,2	2,5	3,8

0 500 KM



**Military alliances in 1914**

-  Central Powers
-  Triple Entente
-  Slavic allies of Russia
-  minority groups in Austria-Hungary



# Economic consequences of WWI

- **US** (CAN, AUS, ARG) **production** and sales **grew** during war:
  - **commodity** and **food** prices were high; **markets** were **secured** (no competition from Europe);
- **Farmers** invested into **new technologies** → borrowing; **after war** **return of E competition**;
- **Non-European countries** (LATAM, Asia):
  - **lost** source of **imports** of manufactured goods from Europe → **industrialized** (or imported from US);
- **European** producers faced **new competitors**... at the same time **was export revenues badly needed**;