

ECONOMIC AND BUSINESS HISTORY 23/24

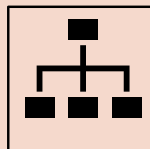
LECTURE 9 – GLOBALIZATION AND BUSINESS



PLAN

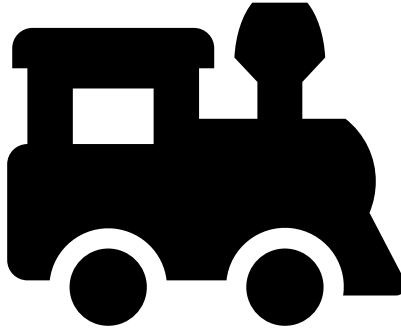


1. Railroads

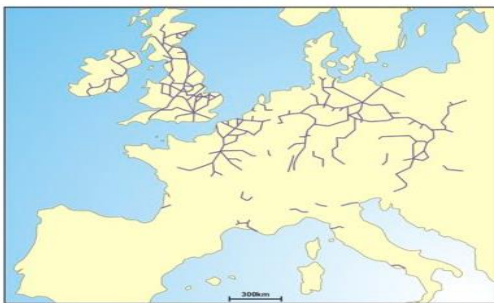


2. The Rise of the Modern Firm

1. Railroads



Spread of Railways



<< In 1850, railways were built only on industrialised regions (where coal and iron were cheap), linking mines and factories to ports

Transport was essentially for goods, linking markets with production sites



<< In 1880, dense networks connecting cities and rural areas

Passenger transport also important

The cradle of the modern firm (1)

- MEG started in textile and ironworking firms, in which property and management were reunited in the same person or family.
- Machinery and other investments were financed by the firm owners (sometimes through commercial banks, but the firm was not the borrower)
- Short-term by commercial banks credit was enough
- On account of their scale and colossal financing needs, the 1840s and 1850s railways, however, posed new problems

The cradle of the modern firm (2)

- 1. The very large dimension of operations required high levels of investments
 - Need for larger stocks of physical capital (rails, infrastructure and locomotives/wagons) and land
 - Operational costs very high
- 2. Complexity of operations (tickets, traffic coordination, logistics, maintenance, stations, management, ...)
- Because of these 2 features, railroads are the cradle of the modern firm

Largest world companies, 1912 (by number of workers)

	Sector	Country	Workers
US Steel Corp	Mining	US	221
Penn. Railroad Co.	Railways	US	149
American Telephone & Telegraph	Telecom	US	141
Canadian Pacific R. Co	Railways	Canada	96
Singer	Machinery	US	91
Paris-Lyon-Med Ch. de Fer	Railways	France	90
Great Indian Railway	Railways	India/UK	90
London & NW	Railways	UK	83
Siemens	Machinery	Germany	81
Great Western	Railways	UK	76
Krupp	Machinery	Germany	73

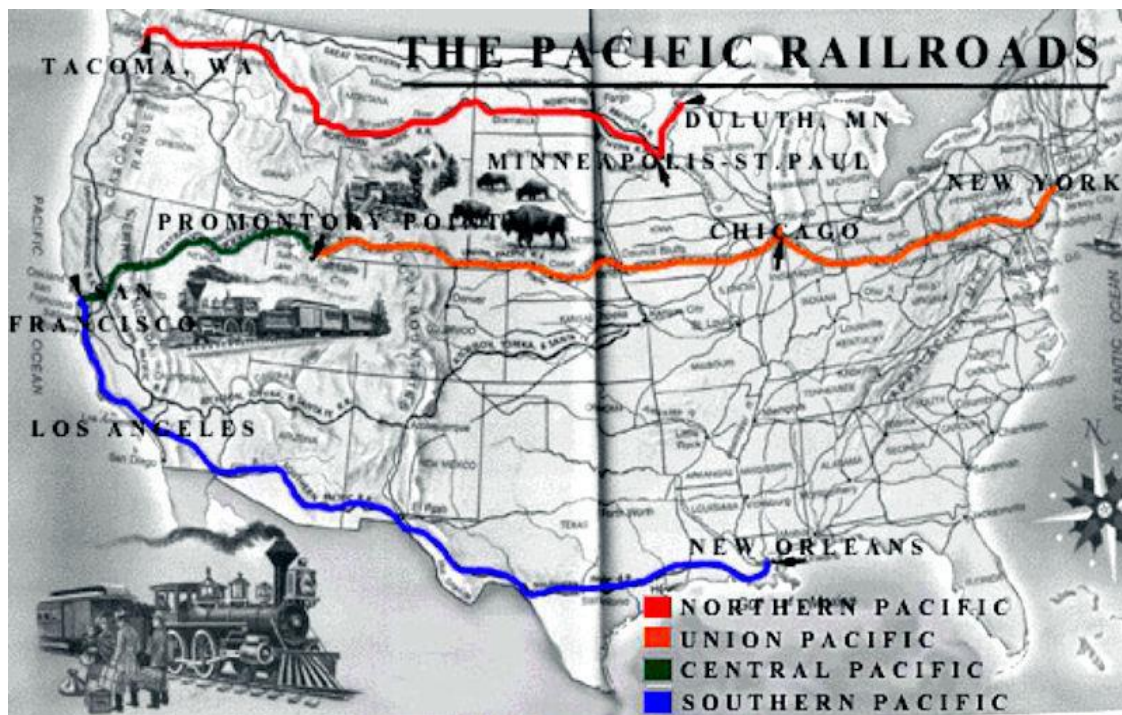
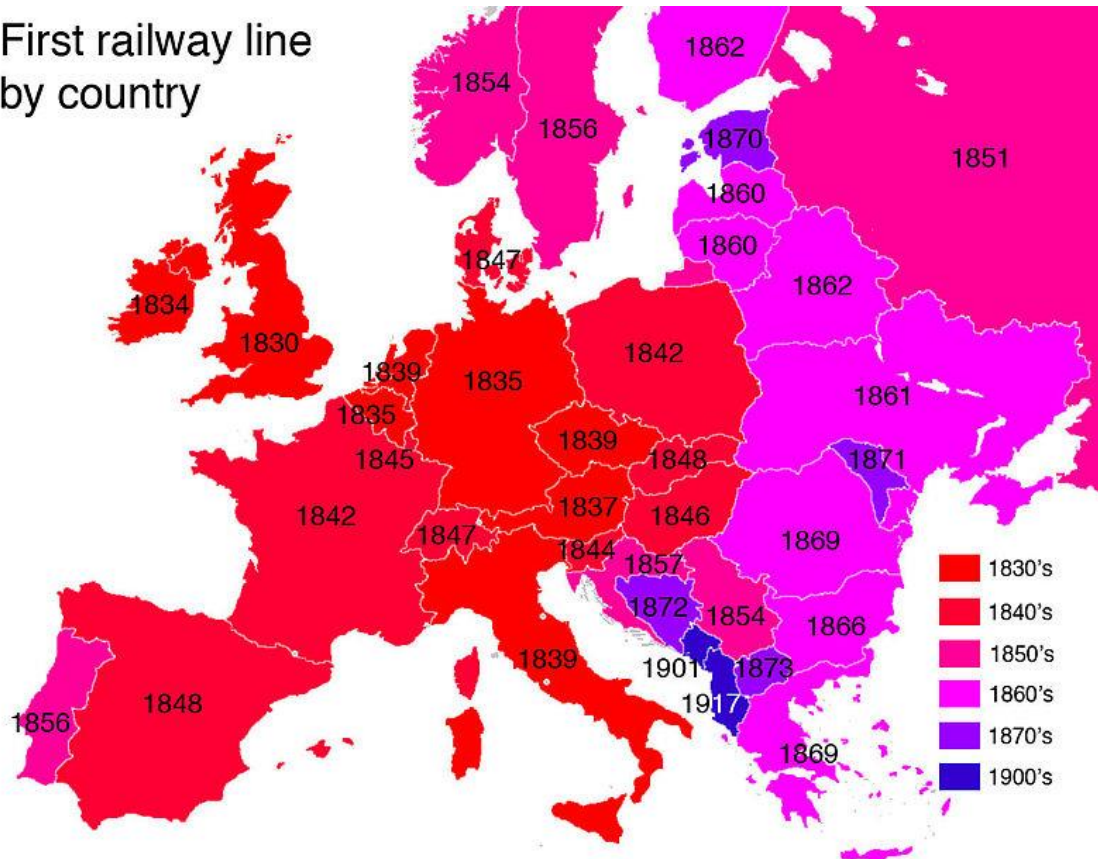
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The cradle of the modern firm (3)

- Additionally, railways are a 'natural monopoly market' (there is little room for competition, as the duplication of lines is inefficient, as it would entail an unnecessary duplication of heavy fixed costs)
- Also, for the states of capital-poor, non-industrial countries railways held great promise, with military and state-building projects being also a factor
- This made railways seem like a relatively secure investment, very attractive for large groups of investors

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First railway line by country



Globalization and Railways

- European capitalists realised that railways were essential for linking inland productive areas with ports steam navigation, in the New World, Asia and Africa
- Thus, after the introduction of steamship lines, railways became a conduit for European (British, French and German) investment abroad
- Thus, railways were instrumental in raising capital in capital-rich countries and invest it in capital-poor economies, including the US
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Largest British Overseas Railways

Table 2. Largest British overseas railways (outside of the US and Canada) by capitalisation (US\$).

Railway company	Location	Capitalisation (\$)	Mileage
Central Argentine	Argentina	285,800,000	3307
Buenos Ayres Great Southern	Argentina	269,000,000	3729
Bombay, Baroda and Central India ^a	India	212,500,000	3634
Buenos Ayres Western	Argentina	148,860,000	1781
Buenos Ayres and Pacific	Argentina	140,000,000	3506
East Indian	India	130,000,000	2717
Cordoba Central	Argentina	96,800,000	1186
URH&RW ^b	Cuba	85,000,000	681
Leopoldina	Brazil	76,000,000	1752
Bengal Nagpur	India	58,625,000	2673
Argentine Great Western	Argentina	56,200,000	978
Madras and Southern Mahratta	India	55,100,000	3133
Argentine ^c	Argentina	52,500,000	n/a
Bahia, Blanco and North Western	Argentina	50,000,000	722
Antofagasta (Chili) and Bolivia	Chile and Bolivia	48,000,000	819
Entre Rios	Argentina	39,875,000	730
Mexican	Mexico	36,700,000	423
Interoceanic	Mexico	36,000,000	1047
Argentine North Eastern	Argentina	32,168,000	667
Bengal and North Western	India	30,200,000	3034

Notes: ^aJoint ownership with the Indian Government.

^bUnited Railways of the Havana & Regla Warehouses.

^cArgentine Railway was a financial firm, rather than a railway company: see the text for an explanation.

Sources: US Federal Trade Commission, 1916, pp. 541–542; *Railway Year Book for 1915*, pp. 292–308.

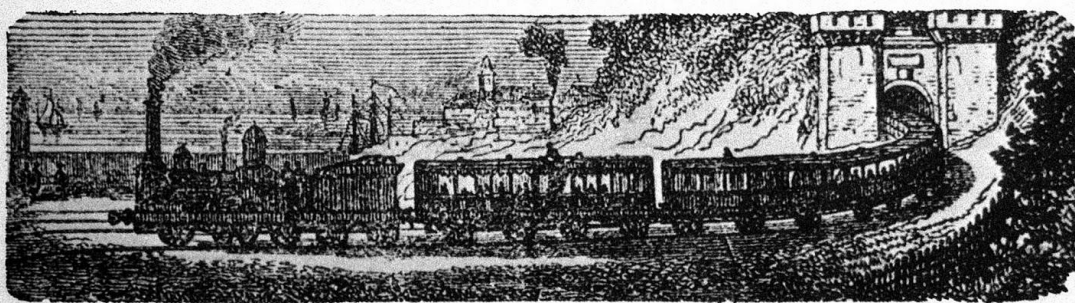
Free Standing Companies

- The worldwide spread of railways meant the creation of a new type of companies
- Firms created by investors in one country to operate exclusively in another one
- Typically, firms operating mines, plantations, banks and railroads in non-European, resource-rich countries
- Extremely effective in raising capital in wealthy countries for business overseas

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Free Standing Companies

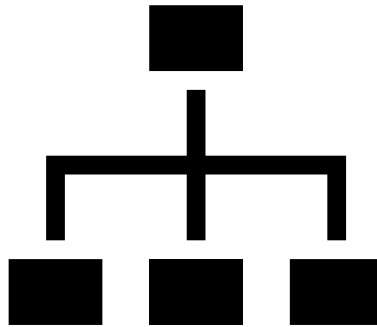
- São Paulo Railway, an English company, of English registration, under London management, owning and working a railroad in Brazil in coffee-rich São Paulo state



SÃO PAULO RAILWAY COMPANY

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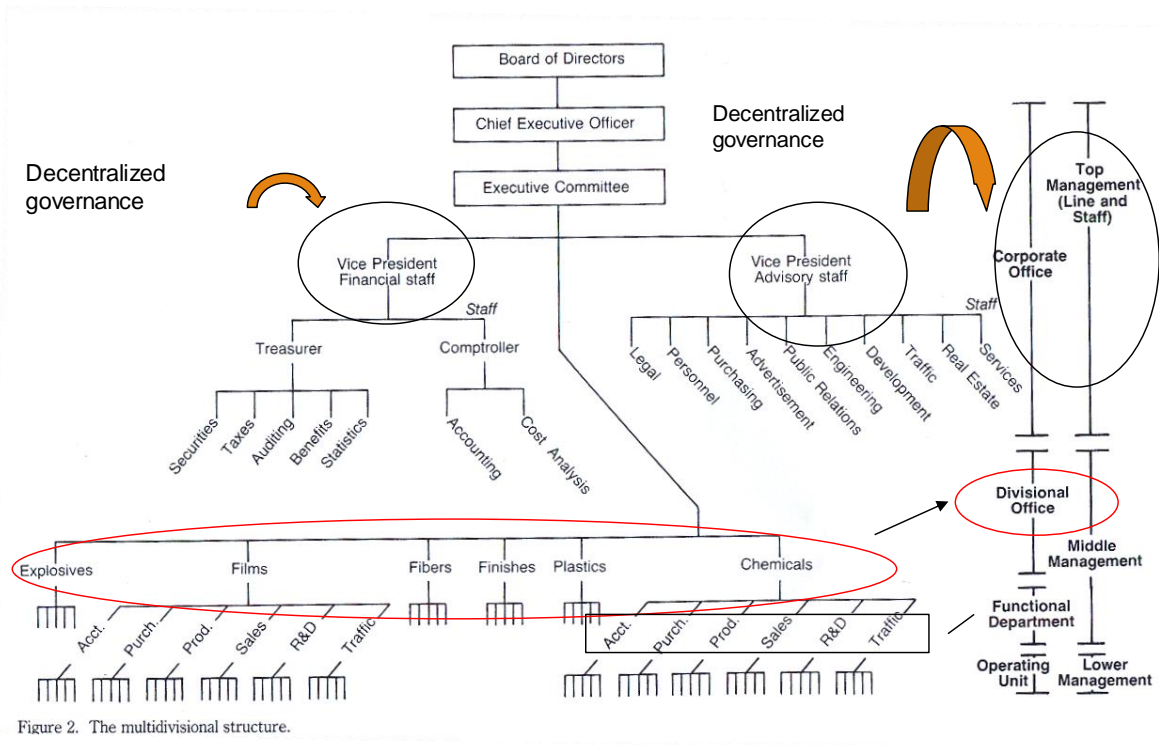
2. The Rise of the Modern Firm



‘Modern Firm’?

- *Free Standing Companies*, created by foreign capitalists were amongst the earliest modern firms
- Modern firm has two essential, modern features :
 - It has a multiunit or multidivisional structure
 - Specialization within the firm / Complexity of operations.
 - It has a managerial hierarchy

Organizational Chart of a multidivisional firm



Modern Firms

- The greater complexity of operations created the need for **professional managers** (also called the ‘visible hand’) who had to maximize profit (via prices and costs)
- Their decisions had to be overseen by an administration board, representing shareholders and whose decisions were known by the capital markets

Globalization and Modern Firms

- Global Capital Flows were decisive in the emergence of the Modern Firms
- In the agricultural– and raw materials-exporting New World, railways were critical to link productive areas with ports, USA, Brazil, Argentina,
- whose decisions are ratified by an administration board, formally representing shareholders, in fact representing the core owners:
- deepening of the separation of ownership and management
- higher dependence on capital markets



Modern Firms

- The US railroads' need for large sums of capital and their great potential changed the relationship between firms and capital
- Large investments could only be financed by:
 - A) Investment Banks / Banking syndicates
 - B) Capital Markets (Stock Exchange)
- US railroads attracted foreign capital to their stock exchange, keeping large shares European-owned (German and British, mostly)



Globalization and Modern Firms (2)

- Modern Firms typically display a growth strategy (oriented toward long-term growth, rather than short-term profits)
- Thus, large manufacturing firms became **Multinationals** (i.e., corporations operating in countries other than those of the original owners)
- This involved great costs but ensured the long-term growth of the company
- Thus, firms could make the most of country specialization and/or enter in foreign markets
- This trend was still recent, when World War I broke up (see list)



Box 4.2 Some large multinational manufacturing enterprises, c. 1914

Company	Nationality	Product	No. of foreign factories in 1914	Location of foreign factories
Singer	US	Sewing machines	5	UK, Canada, Germany, Russia, Austria-Hungary
J & P Coats	UK	Cotton thread	20	US, Canada, Russia, Austria-Hungary, Spain, Belgium, Italy, Switzerland, Portugal, Brazil, Japan
Nestlé	Swiss	Condensed milk/ baby food	14	US, UK, Germany, Netherlands, Norway, Spain, Australia
Lever Brothers	UK	Soap	33	US, Canada, Germany, Switzerland, Belgium, France, Japan, Australia, South Africa
Saint-Gobain	France	Glass	8	Germany, Belgium, Netherlands, Italy, Spain, Austria-Hungary
Bayer	Germany	Chemicals	7	US, UK, France, Russia, Belgium
American Radiator	US	Radiators	6	Canada, UK, France, Germany, Italy, Austria-Hungary
Siemens	Germany	Electricals	10	UK, France, Spain, Austria Hungary, Russia
L. M. Ericsson	Sweden	Telephone equipment	8	US, UK, France, Austria-Hungary, Russia

(Source: author's estimates)