

Lancaster MBA
2018

Understanding the Foundations and Structures of Modern Capitalism

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1. **Our purpose** is to understand the emergence of the modern capitalism that now dominates the organisation and processes of the global economy:
 - a. at the macro level of national and international economies and markets - and
 - b. at the micro level of the individual organisations within which you will probably work
 - c. This will be presented in analytical and historical form, but the material will have relevance to contemporary experience
2. **Discussion will from four components:**
 - a. A conceptual analysis of modern capitalism to understand the relative roles of Markets, Organisations and Networks
 - b. An interpretation of the emergence of modern capitalism and globalisation through markets and industrialisation since 1800, with special reference to the BRIC countries since 1980
 - c. An interpretation of the structures of modern capitalism through the emergence of different organisational forms through four stereotype business models
 - d. An opportunity to reflect on and reconstruct a case study in business growth
3. *a & b* will be presented today and perhaps we will start on *c*; *c* will be concluded tomorrow morning & *d* will take place at Quarry Bank Mill, Styal (near Manchester Airport). There will be class at LUMS tomorrow morning, then please be sure you are in time for the coach that will leave from outside LUMS at 11.30 am tomorrow morning. Lunch will be provided to eat in the coach and in the afternoon there will be a tour of the Mill. We will leave at 5.00 pm and should be back in Lancaster by 7.00 pm at the latest.



A. Analysis of Modern Capitalism: Markets, Organisations and Networks

1. What is capitalism?

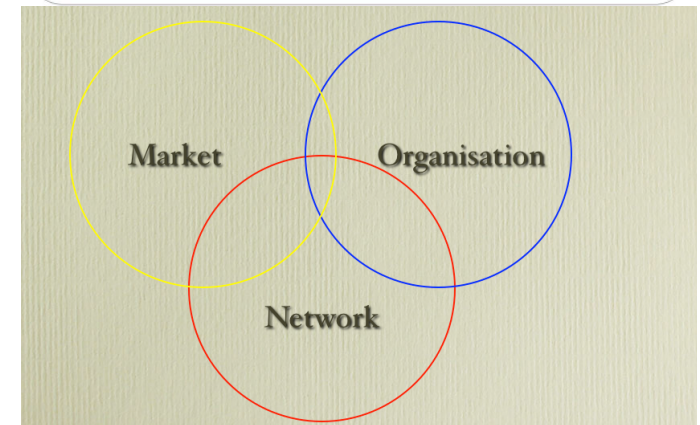
- a. Wikipedia Definition: **Capitalism** is an economic system in which trade, industry, and the means of production are privately owned and operated through the price system. Central characteristics of capitalism include private property, capital accumulation, wage labour and, in some situations, fully competitive markets. In a capitalist economy, the parties to a transaction typically determine the prices at which they exchange assets, goods, and services.'
- b. But notice central role of State: Private Property and Capital Accumulation depends on protection of Property Rights especially through effective Rule of Law - and including protection from arbitrary Government intervention
- c. And also notice efficient operation of markets depends on reliable supply of Money, not essentially but often has been a government function
- d. Markets are an essential part of the story, but are they the whole story?

2. What are objectives of economic organisation?

- a. co-ordination of demand and supply
- b. control and incentives
- c. information
- d. These are necessary to generate efficiency and economic progress - to eliminate wasteful production and/or unsatisfied consumer demand
- e. To allow specialisation - the gains from trade - a key source of economic growth - separates production and consumption - creating need for co-ordination, control and information

3. Three regimes to secure these ends: **MARKETS, ORGANISATIONS, NETWORKS**

- a. All three based on relationships mediated by explicit or implicit contracts
- b. **MARKETS**: explicit contract based on **PRICE**
- c. **ORGANISATIONS**: explicit contract based on willingness to accept **RULE** or **INSTRUCTION** in return for wage or salary
- d. **NETWORKS**: implicit contract based on **TRUST** and **RECIPROCITY**





FTSE 100 Index 2000-2015

4. MARKETS:

- Contracts in Markets generate **PRICE** - the central concept in the market
- Price co-ordinates production and consumption
- Price provides information on demand and supply
- Price provides disciplines and incentives for reallocating production and consumption
- Price does all this at minimum cost with no central control or plan; Only requires individual suppliers and consumers to seek their own best interest
- Price incentivises changes in quantity demanded or supplied: Price balances quantity supplied and quantity demanded
- If Price fixed at any other level: surplus production or queues of customers
- This encourages movement toward equilibrium
- In practice, continual adjustments as price signals the need for changes in quantity



5. ORGANISATION:

- Hierarchy simply imposes power; Bureaucracy exercises power through rules
- Depends on relations between Principal and Agent; Principal issues **RULES** and **INSTRUCTIONS**; Agent follows and/or executes them; **in** modern organisations this relationship governed by contract; Agent consents to follow and/or execute for agreed payment; central direction – Top down control – Individuals serve the whole
- Allows specialisation and comparative advantage to be investigated, planned and managed; if well done, this will increase efficiency; e.g. mass production on assembly lines; And organisations may allow planning and execution faster than market - strategy
- But information discovered at a cost through systems of investigation and control
- And contracts must be enforced to ensure efficient central control
- Task of management: **PLANNING** and **EFFECTIVE CONTRACT ENFORCEMENT** of AGENTS
- ORGANISATIONS** are 'islands' of planning and control in a 'sea' of markets
- Examples: family; firm; nation state: old Soviet Union

6. NETWORKS:

- a. Implicit contracts in Networks generate TRUST; facilitates transparent communication and understanding - enables individuals to benefit from co-operation and collaboration
- b. TRUST driven by RECIPROCITY or learning; continuing experience of mutual benefit from collaboration strengthens TRUST; and reinforces commitment to continued co-operation and collaboration; gives Networks dynamism - more use; more strength and more commitment; the more an individual puts in, the more s/he gets out
- c. Initiated or reinforced by social capital; social institutions or process that generate shared objectives, values, and behaviours; family, clan, religious or ethnic Group, friendship; these automatically build TRUST, transparency and RECIPROCITY; which become the basis for NETWORKS facilitating social or economic collaboration
- d. Authentic TRUST based on real personal experience and judgement; successful NETWORKS therefore usually bottom up and spontaneous - not top down; self-organising; though some NETWORKS can adopt formal organisational structure: professional bodies; and NETWORK activities can develop between ORGANISATIONS as well as individuals; TRUST based on RECIPROCITY in supply or marketing chains or in cartels

7. *Boundaries between Markets, Organisations and Networks:*

- a. Competitors
- b. All three regimes' boundaries are determined by their relative efficiency; market based activities compete with organisation based and network based
- c. Boundaries vary over time and between different economies
- d. Each has advantages:
 - i. Markets can manage great complexity with apparent ease and low cost
 - ii. Organisations can secure objectives quickly, even if they are unpopular
 - iii. Networks can generate great commitment and creativity
- e. But each can also general special costs
- f. Markets carry TRANSACTION COSTS
 - i. Costs incurred in entering a market to carry out a TRANSACTION
 - ii. Search and Information costs
 - iii. Bargaining and contracting costs
 - iv. Policing and enforcement costs
 - v. Importance of information asymmetry



- g. These can be avoided by internalising the TRANSACTION within an ORGANISATION;
But organisations carry their own AGENCY or Co-ordination costs:
Costs incurred when a PRINCIPAL hires an AGENT; costs of difference between AGENTS' and PRINCIPALS' interests; cost of controlling, monitoring or mitigating AGENTS' actions
- h. Importance of information asymmetry
- i. How can these be avoided? the main task of management!
 - i. Can organisations write contracts that secure high performance
 - ii. Can these be enforced?
 - iii. What are the costs of enforcing compliance?
 - iv. Search and Information costs
 - v. Bargaining and contracting costs
 - vi. Policing and enforcement costs
 - vii. Importance of information asymmetry
 - viii. Are these costs so high that the market would offer a better result?
 - ix. Sub-contracting and corporate fragmentation
- j. How might networks offer superior results?
 - i. Transaction costs and compliance costs avoided by trust and loyalty
 - ii. Networks encourage information exchange between members
- k. But networks face problems in dealing with scale, complexity or difficulty
 - i. Because trust, transparency and collaboration decline with:
 - ii. Size of network
 - iii. Complexity of problems faced
 - iv. Mutual benefit impossible
- l. Costs and benefits of markets, organisations and networks determine their boundaries
 - i. All three regimes also Allies; In practice all three regimes overlap
 - ii. Markets controlled by Organisations through regulation
 - iii. Markets facilitated by Networks in marketing, purchasing decisions and supply chains
 - iv. Organisations facilitated by Networks to short circuit bureaucracy
 - v. Organisations made more efficient by Markets through performance related pay
 - vi. Networks given efficient structure through formal organisation - professional bodies
 - vii. Networks lubricated by market payments



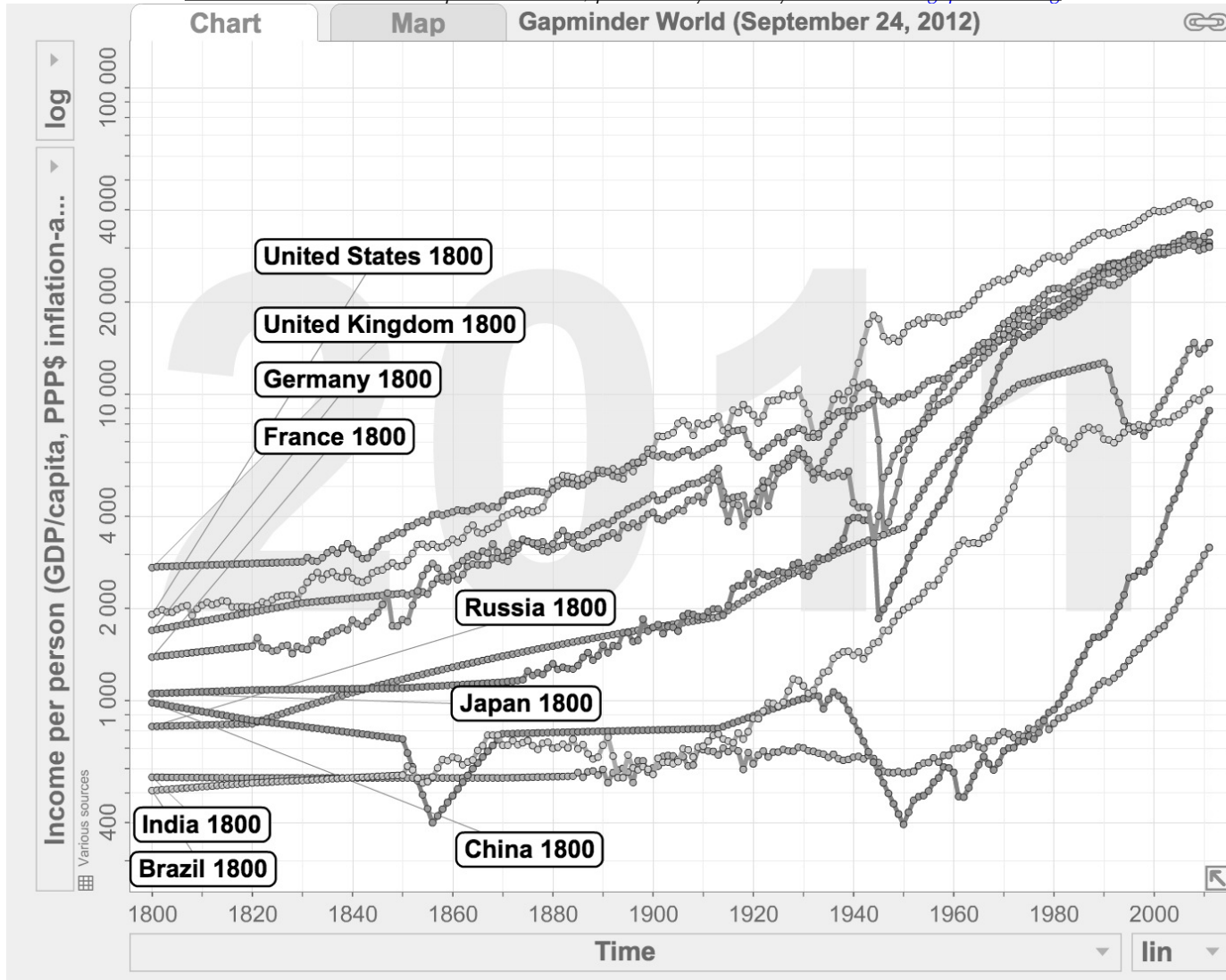
8. Markets, Organisations and Networks and the Forms of Capitalism

- a. US and UK: market based - Liberal capitalism though a very different scale of market and equity market driven
- b. Germany and France: Network based - co-operative capitalism - strong cartelisation and collaboration
- c. Japan and China: Organisation or Hierarchy based - State capitalism - driving forward national strategy



B. The Emergence of Modern Capitalism: Markets and Industrialisation

Visrom Visualisation from Gapminder World, powered by Trendalyzer from www.gapminder.org



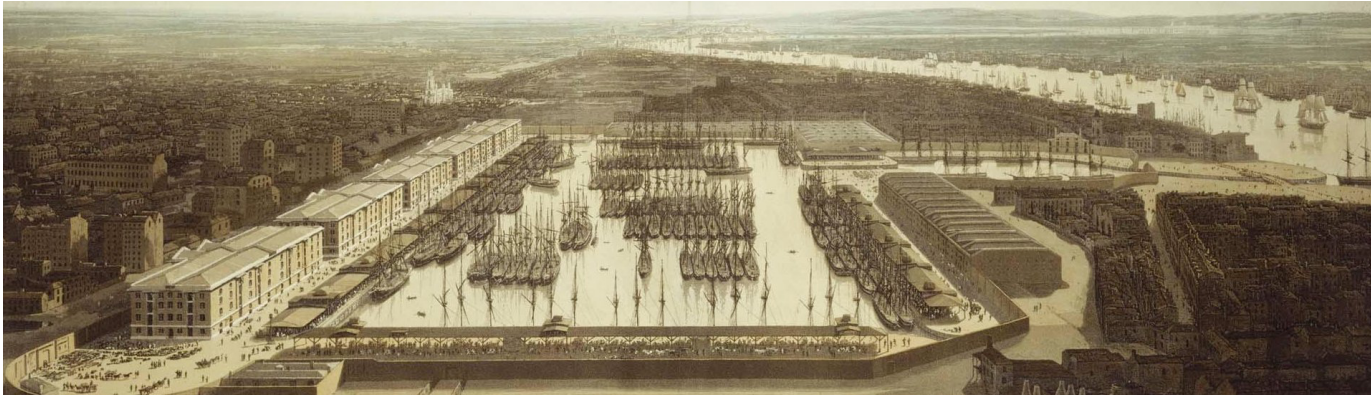
1. The Emergence of Modern Capitalism

- Europe/US begins from higher base in 1800: agricultural improvement and C18th trade based on handicraft trades.
- UK in lead until 1890s: textiles, coal and steel; a factory economy.
- US over takes UK from 1900: beginning of mass production with Ford and more capital/technology intensive production.
- France and Germany catch up with UK from 1960: contraction of agricultural frees labour and mass production spreads to Europe, supported by EEC.
- Japan starts from higher base than other Asian nations: trade and crafts. Accelerates from 1945 (American impact) to catch up Europe by 1972. Factory and mass production, importing technology.
- Russia: slow but steady growth to 1917 (Revolution); heavy industrialisation and growth after WWII, but never catches Europe and slower rate of growth after 1972.
- China: disastrous effect of war 1930-1949 (Revolution); steady growth, interrupted by Cultural Revolution; but then rapid and sustained growth to nearly catch Brazil / Russia by 2010: international trade in manufactures.
- India: some modest growth after 1947 (Independence) but significant growth only from 1980 (Liberalisation)

2. Emergence of Modern capitalism: Domestic Dimension

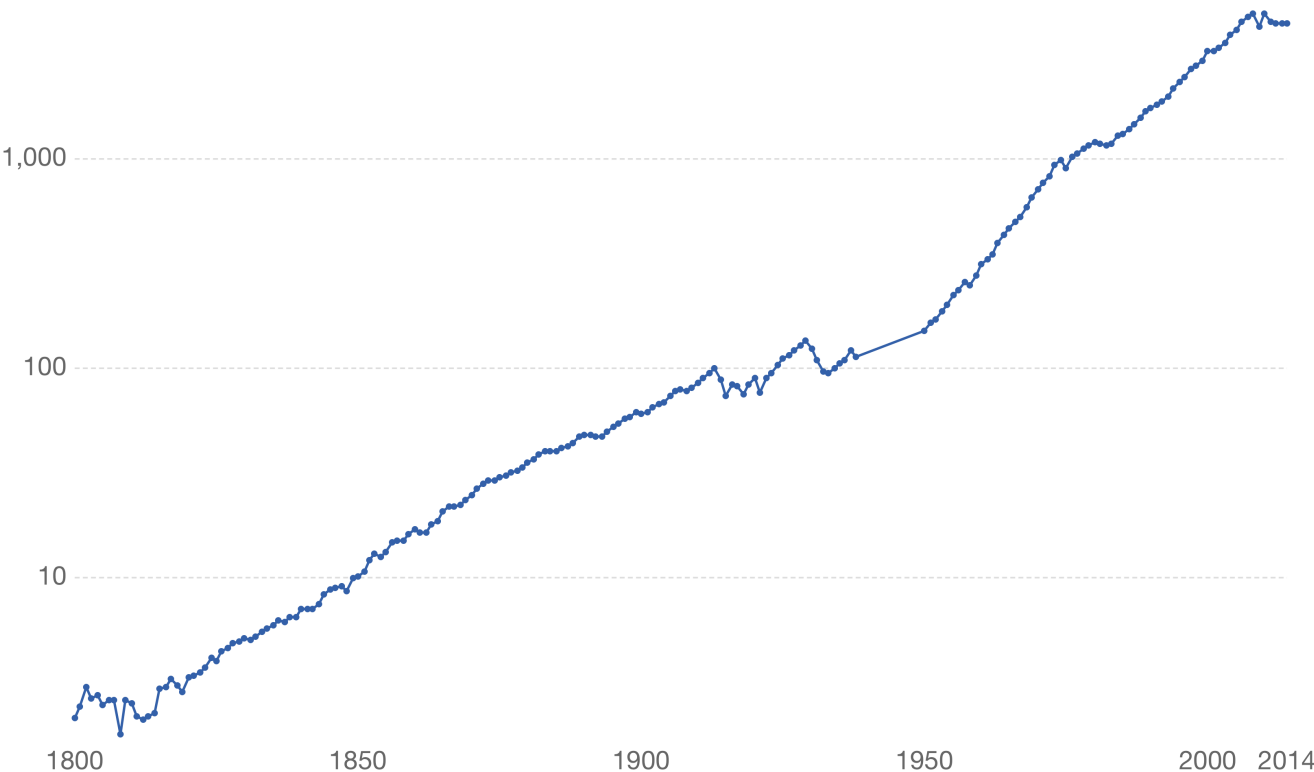
- a. Rule of Law and Property Rights to encourage:
 - i. capital accumulation and investment
 - ii. commercialisation of agriculture
 - iii. trading networks
- b. Stable Monetary and Banking system
 - i. Money: Commodity Money - intrinsic value e.g gold; Representative Money: can be exchanged e.g. gold; fiat money - legal tender
 - ii. But most money in modern economies held in Bank deposits; banks hold stocks of deposits but know that most customers will not require cash at the same time, so can lend against a cash reserve ratio. This creates a buoyant source of credit and liquidity
- c. Technology and organisational change embodied in capital: machinery + power = factory = productivity improvement
- d. Large transfers of labour from low productivity agricultural sector
 - i. Implies improving agricultural productivity increase and agrarian change
 - ii. Decline of agriculture, farmers and landlords
- e. Investment financed by holding wages steady
 - i. elastic supply of labour
 - ii. control of labour force
- f. Domestic transport improvements to increase market size - specialisation.





The value of global exports

Time series of value of world exports at constant prices, relative to 1913 (i.e. values correspond to world export volumes indexed at 1913=100)



Source: Federico and Tena-Junguito (2016)

OurWorldInData.org/international-trade • CC BY-SA

3. Emergence of Modern Capitalism: International Dimension

- a. International specialisation / gains from trade
- b. Britain's central role in the C19th: specialisation in manufacturing; willingness to accept food and raw material imports; generated trade across the world; destroyed craft manufacturing in Asia.
- c. This trade developed world economy in US, Latin America, Asia and Europe because UK willing to export capital to develop infrastructure – and labour to 'new' economies like North America, Australia, NZ and South Africa; followed by peasants of Europe: C19th globalisation – international shifts of capital, labour and goods
- d. Collapse of international trade in 1930s killed world development and led to trade warfare and political extremism.
- e. Trade liberalisation in Europe after 1945 (EEC / EU) raised growth rates in Europe: scale economies and US FDI.
- f. Liberalisation and trade growth from 1980s: platform for Asian growth:
- g. China expanded markets from 1978 (Deng Xiaoping); introduced Special Enterprise Zones for FDI; education of the many supported manufacturing growth through competitive exports to Europe and America.

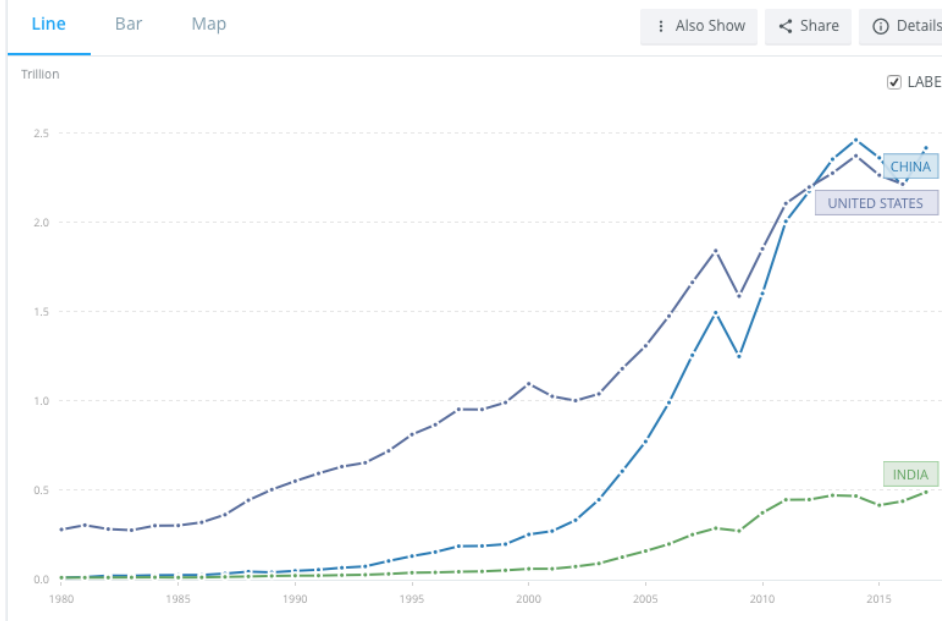
- h. In India, financial crisis led to liberalisation in 1991 (Manmohan Singh), allowing international trade, deregulation and privatisation. Education of the few provided technicians for trade in services, especially IT.
- i. Key question for both countries: income distribution. Key question for China: is personal choice in consumption and employment consistent with continued Communist Party control of civil and political life
- j. Technology transfer via FDI – multinationals; before 1980s, between western countries; then from west to Asia; trade or investment?
- k. Globalisation from 1980
 - i. Far higher incomes in Asia; far higher levels of trade; entry of BRICs to industrialisation; international flows of capital; international flows of labour.
 - ii. But who has gained and who has lost: distribution within countries, rather than between. And international financial system proved unstable: capital flows from Asia to Europe and America; proves inflationary and leads to crisis.



Exports of goods and services (current US\$)

World Bank national accounts data, and OECD National Accounts data files.

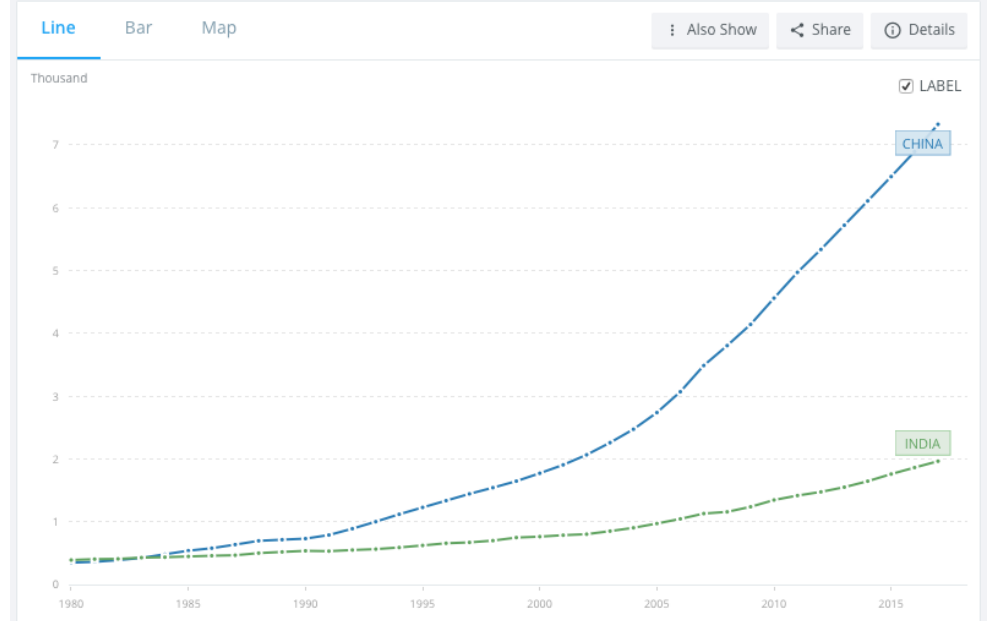
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GDP per capita (constant 2010 US\$)

World Bank national accounts data, and OECD National Accounts data files.

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C. The Evolution of Organisational Forms in Modern Capitalism

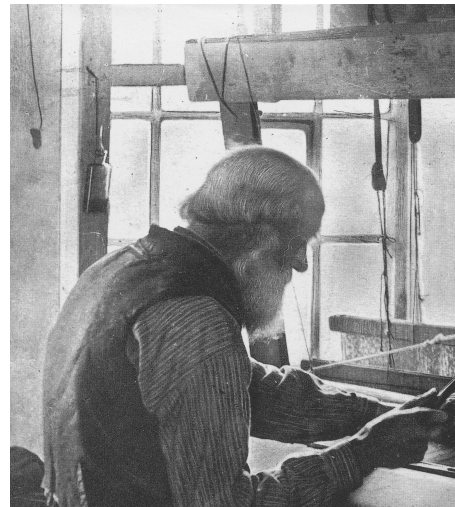
1. How can we understand the organisational structures and institutions through which these changes were accomplished?

- a. Five simple but key dimensions of all businesses
 - i. Technology: the physical or administrative processes
 - ii. Organisation: markets, hierarchies or networks
 - iii. Markets: competitive, oligopolistic or monopolistic
 - iv. Culture: what drives individuals within organisations
 - v. Management style: authoritarian, consensual or democratic
- b. Four assumptions
 - i. Businesses and organisations move towards equilibria where all five dimensions are in balance, because disequilibria are dysfunctional
 - ii. When one dimension changes, this will affect the others and a new equilibrium will be established
 - iii. Large organisations contain different equilibria that require integration
 - iv. Path dependency (inherited structures and behaviours) is always important.
- c. Three suggestions
 - i. Most business and organisations can be put in a few simple frameworks created by these dimensions
 - ii. Frameworks characteristic of historical periods, but can be used to understand the contemporary business world

2. Four key business modes in history and the contemporary world: Craftsman, Factory, Mass production and Network

a. Craftsman:

- i. Technology: individual skill with limited equipment
- ii. Organisation: small scale linked by networks
- iii. Markets: competitive governed by price
- iv. Culture: individualist and craft skill based
- v. Management style: self-management overlaid by credit and information as sources of power



b. Factory:

- i. Technology: power applied to standardised processes
- ii. Organisation: concentration and integration based on economies of scale and control but limited by single product from standard process
- iii. Markets: Relatively competitive but with some collusion and differentiation
- iv. Culture: Paternalism, familial control
- v. Management style: top down control



Largest US Companies, 1917 & 1967 (Forbes and Visual Capitalist)



Source and Article:
<https://howmuch.net/articles/100-years-of-americas-top-10-companies>
<https://forbes.com>

c. Mass Production:

- i. Technology: specialisation through production line with heavy investment in equipment
- ii. Organisation: importance of scale requires corporate form
- iii. Markets: national monopolies with collusion, stability and branding
- iv. Culture: scale and low skills creates work alienation, anonymous bureaucracy and conflict
- v. Management style: hierarchy; standardised control systems; Taylorism to culture management; the Multi Divisional company

Please Note:

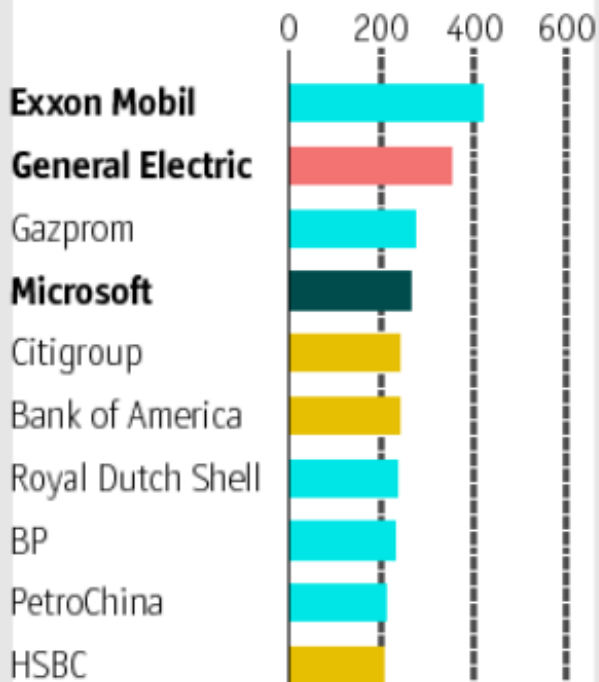
- vi. Chandler describes drive to large scale company as based on triple investment in capacity, marketing and management to create enormous companies - Ford, General Motors, General Electric, Dupont etc. based on scale and homogeneity of US market. only 50 UK companies would reach top 200 US in 1950s.
- vii. Included factory based production as well as mass production modes
- viii. But is their success based on efficiency or national market power allowing them to export at low cost?
- ix. And do some European companies rely on external economies rather than internal economies?

A virtually new world

World, largest listed companies by market capitalisation, \$bn

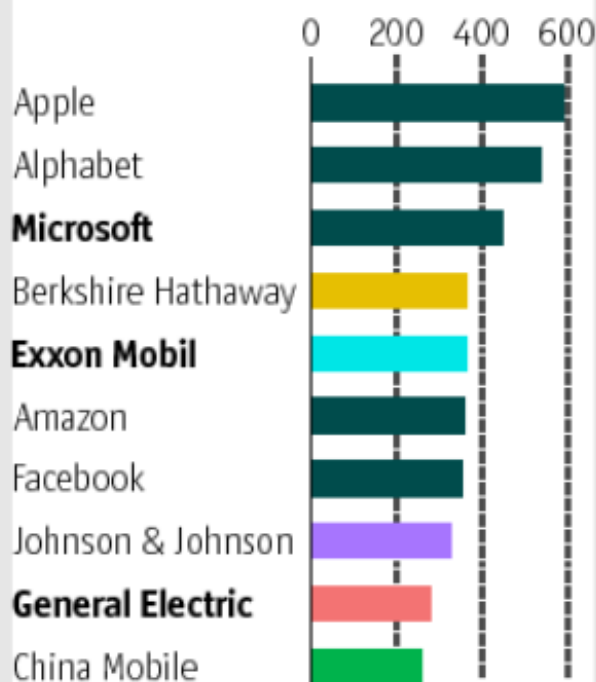
Sector: ■ Energy ■ Financials ■ Health care
■ Industrials ■ IT ■ Telecoms

End 2006



Source: Bloomberg

2016*



*At August 24th 2016

d. Network Capitalism: Fragmentation and Control

i. Technology: Human Capital and Information Technology and Communication

At First Fragmentation:

- ii. Organisation: networks; alliances and collaboration
- iii. Markets: highly competitive on price, brand and service; customer not product focused
- iv. Culture: individualistic; work as fulfilment; complex relationships; knowledge workers
- v. Management style: bottom up; collaborative; self-management; control through culture and markets, end of hierarchy

But Now Control:

- vi. Technology: IT Hubs / Platforms with strong network effects and data extraction
- vii. Organisation: Platform size crucial and drives up competitiveness
- viii. Markets: Monopolistic in supply across product markets; individualistic in sales: extract consumer surplus
- ix. Culture: cost driven but deeply individualistic in management and marketing
- x. Management style: information led and loose contracts



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Quarry Bank Mill Styal, Greater Manchester

The purpose in visiting this site is to give you some impression of the scale of operation, the technology, organisation, culture and management problems of a representative textile factory in the early stages of British industrialisation. My invitation to you is that you should try to recreate the business model that generated this very successful enterprise, within a very different social and economic context to the one you work in yourselves. Try to use the framework I outlined in the class earlier to see how the various parts of the business model worked together. Remember that this business was in its day highly innovative and highly risky, requiring the entrepreneur who led the development to undertake heavy investment in a project that could give no assurance of success. The whole site is now owned by the National Trust and preserved as part of the British industrial heritage.

Samuel Greg, the founder of Quarry Bank Mill was a textile merchant who saw the industry that supplied him being revolutionised. When he began in trade almost all the products in the cotton trade were made by hand and hand power. From 1769 power could be applied to spinning and, while patents protected this technology until the early 1780s, the moment the patents collapsed, there was rapid entry into the business, of which Samuel Greg's investment in Quarry Bank Mill was a good example.





The key to the innovation was the application of power to machinery. Power at this date meant (for the first decades) waterpower, and this required heavy investment in creating the drop in water to power a wheel. In 1796 Greg was fortunate in recruiting a capable engineer as a partner and this led to the construction of the weir to conserve and control waterpower, followed by a succession of more powerful wheels in 1801 and 1807 and a small steam engine in 1810. In 1819 a massive 100-horse power wheel was installed, entirely constructed of iron, with a tunnel taking off the tail water that stretched three quarters of a mile downstream. As early as 1790 205 workers had been employed in the mill and this required the construction of cottages at Styal to house them. This meant that the entrepreneur had to take responsibility for creating the social infrastructure in which the business was embedded. To some extent Greg offset this requirement by importing children from local authorities who had responsibility for the poor. He built an Apprentice House to lodge them in 1790 and for the first fifty years of the mill more than half the workers were children. Thus the creation of a permanent labour force required heavy investment in further housing and the supply of food, eased by the provision of gardens to grow food and by a farm Greg owned nearby. But the workers he recruited had no experience of the disciplined requirements of industrial work. They had managed themselves in an easy-going way in the traditional economy. One of the important tasks for the entrepreneur was to change this cultural attitude towards work. In this respect



Greg's expensive investment in the local infrastructure paid high dividends. He provided a school that educated children in the need for discipline as much as academic learning. And he also built two churches where his influence would have been important in the messages taught from the pulpit, including especially sobriety, thrift and hard work – the creation of an industrious and respectable working class.

Two factors dominated the business model. On the one hand the yarn spun was sold in the highly competitive Manchester Cotton Exchange market, when Greg did not weave it himself. There were few if any ways in which the product could be differentiated sufficiently successfully to raise margins. Greg was therefore at the mercy of the market price. This placed the emphasis on driving down costs and here one of the key elements was the heavy overhead cost of investment in engineering associated with waterpower; the construction of the mill; and the other fixed costs of the infrastructure – housing, roads and so on. This drove Greg to drive up the output of the mill in order to push down unit costs, hence the heavy emphasis on a disciplined workforce whose habits would not disrupt production; on a gasworks that would provide lighting to work longer hours; and on a large mill pond and reservoir; and a steam engine, to guarantee the security of the power supply. It was this that encouraged Greg to manage the work culture so aggressively and to focus on children as a work force, when they were (broadly speaking) more manageable.

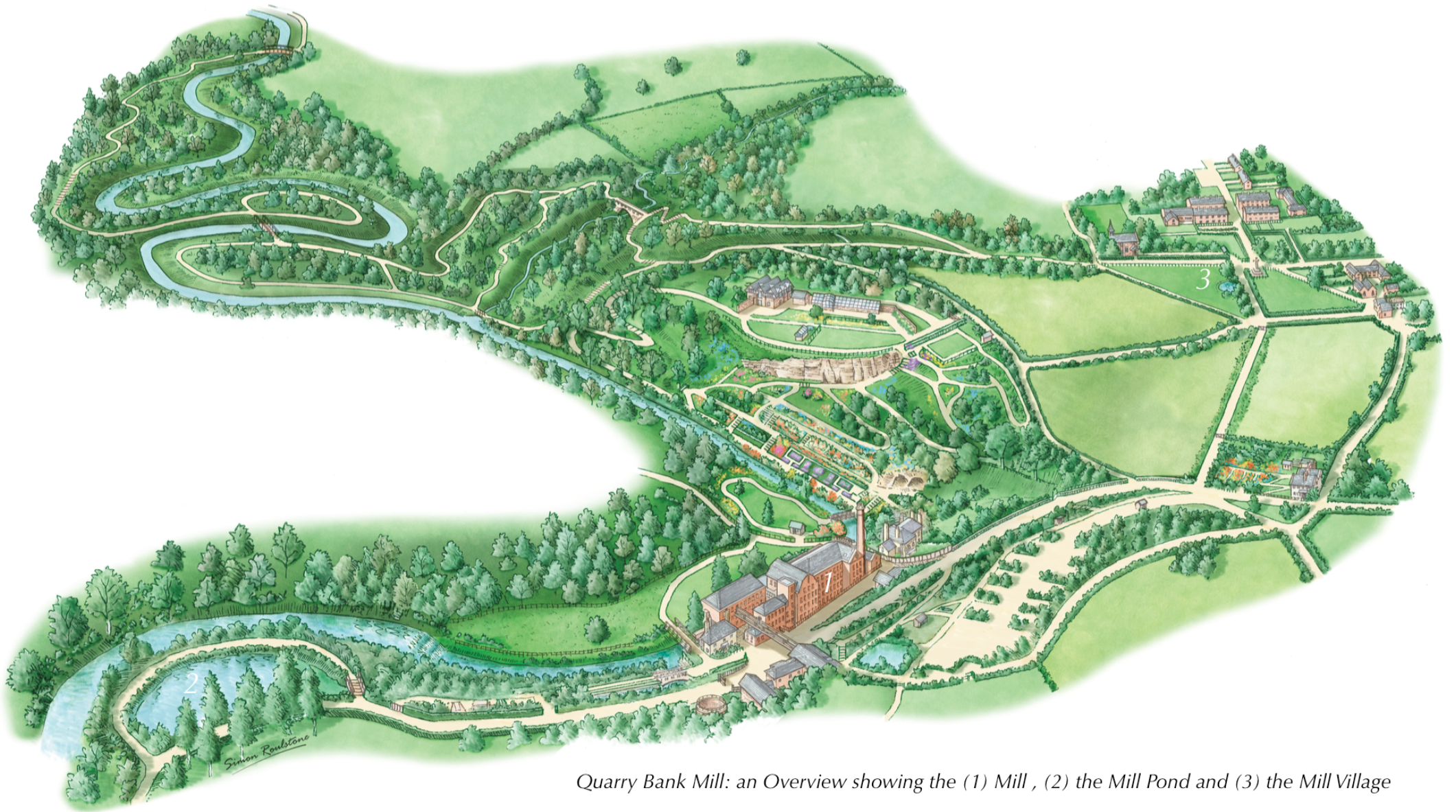


And this disciplined work culture was enforced by a management style that was highly paternalistic: Greg and his sons treated the work force as within their control entirely, using the model of the family or the country landed estate as their model.

Technology and technological change drove the business. Investment in the plant was financed through the family and so the firm was large but not too large to be owner managed. Markets were so competitive that the price had to be taken. This encouraged a disciplined work culture, which was enforced by a top down, paternalist management style, based on family ownership and control.

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Quarry Bank Images © Oliver M. Westall



Quarry Bank Mill: an Overview showing the (1) Mill , (2) the Mill Pond and (3) the Mill Village

Image kindly provided by the National Trust, Quarry Bank Mill