INDUSTRIALIZATION AND THE RISE OF BIG BUSINESS

Three major questions:

1. **What Caused/Helped It?**
2. **How Did the Process Happen? (The 4 “C”s)**
3. **What Was the Effect on the American People? (How did they react? Who wins? Who loses?)**

1. What Caused/Helped It?

A. The Railroad nurtures Economic Expansion:

- consumes resources: steel, timber, coal, iron, locomotives

  (the railroads create a guaranteed market for these goods)

- links raw materials to processing centers

  (coal and iron ore to steel mills; cattle to slaughterhouses; copper to metal goods manufacturers; trees to lumber yards)

- links agricultural products to urban consumers

  (people eat better and cheaper; they are healthier – and more efficient workers; they have more money left over after buying food to spend on other goods and services, thereby stimulating the economy)

- speeds the development and population of the West

  (moves people to where there were no people previously creating a wider scope for goods and services – hotels, stores, materials to furnish new homes, etc.)

- creates markets for newly mechanized agriculture

  (farmers grow more crops with aid of machines – railroads enable them to access a larger market in which to sell their crops)

- enables farmers to expand their production; more food sustains cities where industrial production takes off due to increased population
- expands the demand for employees; more jobs draw more people (immigrants); railroads help them settle in the West where they take new jobs
- expands the demand for manufactured goods in the west because the railroad brought people west; railroads now transport goods west to satisfy the demands of new residents – the very people the railroad brought west in the first place

- shows how big business is managed: integrating operations, managing goods, people, money, and information – the railroad becomes the model that other big businesses imitate

- even creates time zones and changes people's expectations for what can be accomplished in a certain amount of time (makes time more valuable)

B. The abundance of **<u>natural resources</u>** (fossil fuels like oil and coal, minerals, timber, iron, gold, cattle, copper – American has a wide <u>variety</u> of natural resources, all in great supply)

C. **<u>Foreign investment</u>** – particularly from Great Britain.

(British investors are those who have profited from the industrial revolution in Great Britain, which began a generation before it began in the U.S. They now are looking for projects in which they can invest the money they have made.)

D. **<u>Tariffs</u>** provide government with money, but raising the tariff also helps protect developing American industries

E. **<u>Processes</u>** for manufacturing

1- economies of scale – by doing something bigger, one could do it cheaper

if you produce a mass quantity of a particular product (or raise crops on a large scale) each unit you produce can be produced at less cost, in part because you have figured out how to produce it efficiently.

2- economies of scope – broader market for products

if you can transport your goods quickly and cheaply longer distances, you then have a chance of reaching more customers → the *<u>scope</u>* of your market has increased

[Sometimes, when producers have a market with a larger *<u>scope</u>*, they decide they can now produce *<u>more</u>* (and therefore take advantage of economies of scale). In this sense, economies of scale and scope – though two different things – can be related. (Given larger scope, one can produce on a larger scale)

3- division of labor – break down a process into various component parts

doing so makes each job require less skill; once you have unskilled workers handling only one component of a larger process, each of those workers is easier to replace

(As a result of deskilling of labor, workers do not identify as producers – shoemakers, for example – but rather as wage earners. Status comes not from one's *skill* but rather from what one can buy with one's wages. This marks the shift from a *producer* to a *consumer* economy.)

4- continuous flow – keeping the machines running all the time is more efficient

(Carnegie steel plants keep their blast furnaces running 24/7 since shutting them down and starting them up every day is actually more costly than continuous flow.)

F. New methods of *financing* companies and *administrating* them

1- limited liability (investors only liable for the amount they invest – if you invest $100 in a company and the company goes bankrupt, the company's creditors can only demand $100 from you.)

2- more sophisticated accounting methods enable businessmen to determine how to make the most profit by keeping better track of long- and short-term expenses

3- rudimentary management information systems enable you to make more informed decisions on inventory, purchasing, price points, etc. at a moment's notice.

2. How did the Process Happen?

Rockefeller and "THE 4 C's"

1. COMPETITION

Drives down prices so no one makes a good profit. The company with the most capital (i.e. money in the bank) can hold out longer without making a profit, but, even so, this is more about losing money than making money.

2. COOPERATION

Fix prices; divide up the market; agree to keep costs of production the same for all those who are cooperating

Companies form "pools," but it always seems like someone "cheats" by lowering prices

Also, there is a chance that a new competitor – who does not belong to the group of companies who are cooperating – can enter the market and undercut the pool's prices

Pools raise suspicions of illegal price fixing – threat of government intervention. Therefore, nothing is put in writing, but absent written, legally binding contracts, cheating becomes even more likely.

3. CONSOLIDATION

<u>Horizontal</u> Integration
(one oil refinery buys the other competing oil refineries)

Concentrates resources and takes advantage of economies of scale

-- you only need one accounting department or human resources department, rather than six

-- not only do you need fewer accountants, you don't need highly skilled accountants to do all the work; the easier work can be delegated to less skilled accountants to whom you can pay a lower salary, leaving the highly skilled accountants to work on the most complicated problems.
-- the "brand" becomes more recognized and respected
-- easier to secure deals with railroads since you are shipping in bulk; easier to buy needed materials since you are purchasing in bulk (In Rockefeller's case, he demanded railroads pay him the profits they made shipping other companies' oil – thereby removing the incentive they might have to transport oil that wasn't his.)

(Horizontal integration doesn't work as well in low-tech/low-capital intensive industries such as salt and cord because it is easy to start up a new salt company or cord company and enter the market as a competitor since in these and similar industries, there is not much start-up capital needed. Capital intensive businesses – like oil refining are more likely to benefit from horizontal integration.)

Rockefeller as a case study in Consolidation:

Standard Oil takes over 24 firms in 1876

35 in 1877

Three years later – up to over 100

4. CENTRALIZATION

Vertical integration
(a company controls and profits from every step of the production and distribution process)

In the case of Rockefeller's Standard Oil, this might mean owning:

the land where the oil is
the drill bit company that supplies bits for the oil wells
the oil drilling company
the refineries
the barrel company
the wholesale outlets
the retail outlets

Integrating "backward" means going further back in the process – from refining oil, to purchasing crude oil, to drilling for oil, etc.

Integrating "forward" means going forward in the process – from refining oil, to selling the refined oil to wholesale distributors, to the wholesalers seller to the retailers, etc.

The business that is "centralizing," one might say, is in the "center" of the process and then proceeds to integrate both forward and backward.

Rockefeller's business takes off after consolidation (he has a larger market share) but he really begins to rake in profits after centralization (he is not paying a profit to anyone – he controls each step of the process.)

Rather than raising his prices to insure a large profit margin, Rockefeller takes the long view.

Reasonable prices will mean more customers and the profit will come in the aggregate – more people buying oil means more profits. If prices are too high, profits will come, but there will be fewer customers.

Also, if prices are kept reasonable, other entrepreneurs have an incentive to find new uses for Rockefeller's oil. And, in fact, this happens: gasoline, a by-product of the oil refining process becomes a fuel source for the newly invented combustible engine, thereby opening up a huge new market for Rockefeller to exploit.

By the turn of the century "Big Business" has emerged and new rules of the game have become standardized.

WHY IS BIG BUSINESS SOMETHING NEW?

Features of Big Business

-- large pools of capital needed; makes it harder for start ups (limited liability is a must)

-- huge fixed costs (overhead); more than just the costs of operating your business day to day

-- altered nature of ownership (workers have little contact with the boss)

3. What was the effect on people? (Who wins? Who loses?)

Small business often loses – but sometimes small businessmen sell out at a good price (Some of owners of refineries Rockefeller bought end up doing pretty well.)

Consumers generally win as prices go down (Walmart Effect)

Companies also fear government intervention for price gouging, so prices remain relatively low

Still, profits rise since more efficient production methods enable companies to make more product for the same costs

Profits, however, remain disproportionately in the hands of business owners and stockholders. Workers derive some benefit in raised wages, but the deskilling of labor leaves them in a weaker position vis a vis the factory owners.

Moreover, even though industrial workers wages' rise, working conditions are unsafe and there is no safety net if one is disabled or even temporarily injured.

Also, great inequalities of wealth develop – the president of the company makes exponentially more than the entry level worker whereas before the owner of a small shop or business didn't make that much more than his workers and apprentices.

To demonstrate the inequality, consider:

Richest 1/10 receives 34% of the nation's income

Poorest 1/10 collects 3.4 %

Middle Class does ok – can buy more luxuries cheaper; has more free time. But the social turmoil caused by industrialization concerns many middle class Americans who fear a revolution or the environmental degradation that could affect their health.

In general, Big Business wins when the business is operated effectively, but if the business is not well run after large sums of capital are invested, the losses can be catastrophic. Not all big businessmen sustain their wealth over a lifetime.

Everyone must get used to a *new economy* based on speculation and finance rather than production. (I am no longer the owner of a shoe business, I am a businessman → I make money, not shoes.)

Workers identity is grounded in how much they can *buy* with their wages (consumers) rather than in what they can *produce* (highly skilled craftsmen)

While Big Business emerges triumphant, other social movements are developing in which different groups are pushing back against the trend – particularly workers and farmers.

These groups are not necessarily anti-capitalist, but they insist that workers and farmers should have the chance to benefit from the capitalist system, too. They argue that they aren't getting their fair share of the nation's riches, that the "monopolists," having benefited from the capitalist economy, were taking unfair steps to keep others from benefiting.

One sees this resentment in the political cartoons of the time that portray Rockefeller as an "octopus" grabbing everything within his reach and leaving little behind for others who hope to start their own businesses.

The chart showing Rockefeller's wealth as a proportion of the entire nation's wealth supports the view that he has a disproportionate share of the nation's wealth (and thus a disproportionate amount of power over the entire economy.)