

B. The Rise of Modern Economic Systems

1. The Historical Development of Capitalism
2. Theories of Economic Change: Classical/neoclassical, Marxist, and Evolutionary
3. The Marxist-Leninist Critique of Capitalism

The Historical Development of Capitalism

European/Anglo-American focus

The result (or latest stage) of a long historical process

- Traditional subsistence economies: hunter-gatherers, small extended family or tribal bands.
- Marx's primitive communism, Sahlin's original leisure society vs. Hobbes' view that life was "nasty, brutish, and short."
- "First economic revolution," circa 10,000 years ago: settled agriculture, domestication of animals. Predominance of agriculture through most following history.
- Ancient hydraulic civilizations (i.e., Tigris/Euphrates, Yellow River, Nile, and Indus) around water control/irrigation, use of large-scale labor projects, creation of 'surplus.'
- Military technology (iron, bronze, et cetera) helped to create centralized power, class societies, autocratic government, and the great ancient empires. Oriental despotism.

Precapitalist history, continued

Classical Slave Economies:

- **Greek cities** (i.e. Athens, Sparta) mostly slave-based.
- **Roman Empire** dominated Europe and entire Mediterranean until its collapse in 5th & 6th Centuries.
 - Class society of patrician, plebian, and slave.
 - Rural economy (*latifundia*), with relatively large cities.
 - *Collegia* of free artisans.
 - Mostly nonmarket economy, but there was "free trade."
 - As in prior civilizations, individual/family wealth resulted from military, political, and religious power, not economic activity.

Collapse of the Roman Empire brought the end of economic development, chaos, declining population and the emptying of cities, the dark ages, and the slow development of Feudalism.

What was Feudalism?

Roughly, the economic system of Europe from the 5th through the 15th Centuries, with many local variants.

- Cellular, rural, agricultural, mostly non-market economy.
- The militarily powerful developed into lords and overlords, with bonds of military support and loyalty, and eventually into an aristocracy entitled through birth.
- Manorial system: serfs tied to land and lord, with implicit rights, access to land and commons based on subsistence and tradition, as well as responsibilities to lord and church.
- Very little social mobility. Again, wealth resulted from power.
- Property rights were incomplete, even for the aristocracy: the lord's ownership was conditional on will of his overlord.
- Powerful Catholic Church with little tolerance for scientific rationalism, though monasteries (esp. Irish) did protect classical writings and promote literacy.
- Nonexistent capital markets due to laws against usury, though there were moneylenders for princes to fight wars.
- Travel dangerous and difficult, so inadequate transportation and communication.

Factors Leading to the Demise of Feudalism

- Checks on king's power over lords (e.g., the Magna Charta).
- Crusades and contact with the East.
- Re-emergence of trading cities tolerated by local lords. Craft guilds dominated initially.
- In Netherlands, an independent society free of domination by kings, with easy access to ports and rivers.
- Elsewhere, the growth of strong nation-states beyond feudal ties, with centralized and formalized authority.
- Evolution of money, banking, and the corporate charter – fundamental conditions for economic development.
- In England, the evolution of Common Law.
- The disruption of plagues (e.g., the Black Death).
- The Enclosure Movements (13th – 18th Centuries) for more profitable use of land.

More Factors:

- The *Renaissance* – not just Italian art, but a new era of creativity and rationalization in thought, and the beginnings of real science (not just memorization of Aristotle's untested opinions).
- The *New World* – overturning of the old world view, an outlet for the discontent, new resources, and an opportunity for exploration and new wealth.
- The *Protestant Reformation*:
 - Undermining of traditional authority
 - Lutheranism and salvation through individual initiative
 - Calvinist predetermination and prosperity
- Rise of "bourgeoisie" as an economic and political force in cities, and the movement of landless peasants (the "proletariat") to the cities.

The Capitalist System

- A commercial system, and a spirit of enterprise based on profit rationality.
- Defining conditions include:
 - The private ownership of property (esp. capital) – *the pooling problem*
 - The hiring of labor for wages
 - Production for a market
 - Competition among producers
 - Retention of profit by producers for accumulation (investment)
- Marx defined it as a mode of production in which the bourgeoisie used their control over the means of production to exploit the proletariat. He saw it as a historically necessary stage, as an “engine of progress.”

Stages

- Mercantilism: an early stage of capitalism, with the objective of enriching the crown.
 - Encouragement of monopolies, trade surpluses, with state control and intervention.
 - Opposed by Hume, Smith, Ricardo, and others.
- Commercial capitalism:
 - development of limited liability corporations, banking system.
- Industrial capitalism:
 - capital-intensive technologies to replace labor power, development of factory system
 - interchangeable parts, repetition and specialization, time clocks.
 - Rise of unions along old craft guild lines.

About Capitalism...

- In its early stages it was characterized by great poverty and inequality (which was not new) and by a high savings rate (which was new).
- After the mid 18th Century, it led to rapid technological progress (e.g., the rise of the factory system, and the industrial revolution), and wrenching social changes.

“Everything that can be invented, has been invented.”
- Head of U.S. Patent Office, 1899
- Capitalism led to industrialization, urbanization, export orientation, and self-sustaining growth.
- It also led to an population explosion (see prior lectures) and rapid exploitation of natural resources (including rapid species extinction).

Conditions for Growth

Bernstein's (William, not Morris) book posited four conditions necessary for sustained economic progress:

- 1) **Property rights**—Creators must have proper incentives to create.
- 2) **Scientific rationalism**—Innovators must be allowed to innovate without fear of retribution.
- 3) **Capital markets**—Entrepreneurs must be given access to capital to pursue their visions.
- 4) **Transportation/communication**—Society must provide mechanisms for effective communication of ideas and transport of finished products.

These conditions were first met in the Netherlands, then the UK, then the USA. Steamships, railroads and telegraph accelerated everything.

An Alternative Explanation

Jared Diamond's *Guns, Germs, and Steel* provides an alternative explanation for why the European economies were able to conquer much of the rest of the world. It wasn't just that they had conditions for economic success.

"Much of the credit for European military success in the New World can be handed to the superiority of their weapons, their literary heritage, even the fact they had unique load-bearing mammals, like horses. These factors combined, gave the conquistadors a massive advantage over the sophisticated civilizations of the Aztec and Inca empires.

"But weapons alone can't account for the breathtaking speed with which the indigenous population of the New World were completely wiped out.... Instead, Europeans were aided by a deadly secret weapon they weren't even aware they were carrying: Smallpox."

(From the PBS website)

Theories of Economic Change: classical/neoclassical, Marxist, and evolutionary

- Why and how does economic change occur?
- Is economic change essentially technological in nature, or does it either rely on or cause social and political change?
- Is it revolutionary or evolutionary? Gradual or sudden?
- Can it be explained as the result of a rational process?
- Is it convergent or divergent?

The Classical View

- Change is a gradual process
- Growth is primarily a function of capital accumulation
- Tendency toward equilibrium
- Ricardian/Malthusian Dialogue
- Malthusian model: population growth, the iron law of wages, diminishing returns, and the *dismal science*.
- Ricardian model: economy will eventually stagnate. Rising food costs, rising land rents, rising nominal wages, falling profits, falling investment rates (worsened by proportional depreciation.)

Contrast with **Neo**-classical View

- Same view of gradual, equilibrating change.
- Growth results from:
 1. investment in physical capital
 2. technological progress resulting from the incentive to invest in research and development
 3. improvements in human capital resulting from individual incentives to invest in skills and education
 4. improvements in efficiency resulting from efforts to increase profits.
- Market economies with clearly-defined property rights and a minimum of government intervention are best able to provide the best incentives that lead to economic growth.
- The neoclassical view is thus much more optimistic about the prospects of continued growth, and growth in per-capita income.

Neoclassical economists are also much more optimistic about the problem of population growth.

- The decision to have children is a rational decision based on tradeoffs, not the product of uncontrollable breeding.
- As the opportunity cost of having children rises with an increasingly urbanized, industrial society in which both men and women may work, people may (and often do) choose to have fewer children, especially when women have more ability to choose.
- As infant mortality declines, people have fewer children (the *genetic lottery*).
- Countries with social safety nets have fewer children, as adults don't need more children to take care of them in their old age.
- Finally, population pressures increase the incentive for doing things more efficiently.

The Demographic Transition

If economic development leads to lower population growth, why has population exploded?

- Death rates based on nutrition and medicine – first to fall.
- Birth rates based on culture, history, incentives – slower to fall.
- Populations with bottom-heavy distributions have demographic inertia.
- Result is a transition from low population to high population, not a continuous explosion.

In the neoclassical view, international trade and finance is particularly important:

- Firms are encouraged to produce more efficiently, and economic growth occurs from specialization and exchange.
- An international division of labor leads to overall gains from trade that are shared among nations. The flow of goods, services, and capital between countries favors higher returns and lower costs.
- As a result the forces of supply and demand tend to lead towards an equalization of prices, wages, interest rates, and policies across nations, and thus tends to lead towards increasing economic convergence.
- Governments of countries which engage in global competition are less likely to get away with government intervention, since markets punish countries with inefficient policies (e.g., capital flees countries with high taxation or unstable monetary policies).

Marxist Theory of Change

- Karl Marx, Communist Manifesto, Das Kapital
- Economic change is a evolutionary (even revolutionary) process, and one which determines social and political structures.
- Based on Georg Hegel's idealist philosophy of the dialectic: conflict between thesis and antithesis leads to synthesis – a struggle between opposites.
- Marx saw history as determined by materialism and the struggle between socioeconomic classes.
- In historical materialism, productive forces determine the relations of production, which in turn determines the superstructure.

Marxist Theory of Change (2)

- The dialectical process is that as productive forces change, contradictions between productive forces and the relations of production emerge and accumulate.
- Eventually, this leads to qualitative (sudden and noticeable) change over a relatively short period of time (e.g., tectonic movement and earthquakes).
- Like the Yin and Yang of Chinese Daoist (Taoist) philosophy, each economic system (thesis) carries inside it the seeds of its own opposite (antithesis), and therefore of its own destruction.
- Societies advance according to a predetermined pattern -- Primitive Communism to a Slave Economy to Feudalism to Capitalism to Socialism to Communism and the end of history -- in a grinding historical process impervious to the actions of individuals.
- Reforms of any sort which attempt to change aspects of a system without changing its inner nature are doomed to failure.

The Evolutionary Change Hypothesis

Q: What's the difference between economics and sociology?

Economics is about how individuals in a society make choices (given scarcity, constraints, and information).

Sociology is about how society leaves no choices for individuals to make.

Q: Do people choose their economies (including institutions, technologies, and government policies), or does their history choose for them?

Q: Are economies optimal in any sense?

Q: Can we take a well-accepted theory that applies to biology -- to DNA, cells, genetic traits, and species -- and apply it instead to economics and human cultural behavior?

The Biological Theory

- Charles **Darwin's** theory of natural selection.
- **Darwin** was inspired by **Malthus**.
- The pressure of a population upon limited resources must lead to competition among individuals.
- Given the variation present in any population, those individuals who are best adapted to their environment have the greatest chances of survival.
- Given enough time, this leads to new species emerging from old ones (particularly if populations are isolated).
- **Wallace**: "survival of the fittest"

What we are not talking about...

Spencer's Social Darwinism – the argument that socioeconomic hierarchies are innate and based on biology.

- Old history, dating back to Socrates – but at least he knew it was a (convenient) lie.
- **Condorcet** said that proponents of such a view “make nature herself an accomplice in the crime of political inequality.”
- The Eugenics movement, which Hitler took to its logical conclusion.
- The *Bell Curve*, and many other books, based on what **Stephen J. Gould** and others call bad science and a selective reading of the evidence.

Gould argues that this view makes the twin fallacies of:

- (1) biological determinism (example of height)
- (2) ranking (great chain of being)

Biological Evolution requires:

- 1) The variation of individuals in a population, in which some are better adapted than others for a particular environment;
- 2) A selection mechanism (*competition*) which leads to those whose variation is less successful in a given environment to survive in lesser proportion than those more well-adapted;
- 3) A transmission mechanism (*heritability*) which allows surviving parents to pass on their better-adapted characteristics to their offspring; and
- 4) Lots of time (*iteration*).

If these four conditions are met, then evolution is hard to argue with. In spite of religious discomfort with #4 and the implications, and constant scientific debate on the minor specifics, evolution is fundamental to all natural sciences.

Is evolution the same as “progress”?

- A simple view of evolution tends to equate it with progress, as if objectively superior beings were replacing inferior ones (fallacy of ranking).
- Modern evolutionary theory is much more complex: great variety and interdependence among and between organisms; many strategies for adapting to the environment (e.g., simple and complex organisms, parasitism and co-evolution).
- As **Gould** once said, history is contingent. Adaptation to the environment depends on the specific context. Often called path-dependence.

- So evolution is *not* the same as progress.
- Evolution is also not the same as adaptation. Individuals may adapt to new environments, and some species are more adaptable than others (e.g., humans and high elevation).
- In complex organisms, mutation and variation most often reduces fitness.
- Essential randomness: genetic drift in small populations can overwhelm selection.
- Populations evolve, not individuals.
- This analysis does not *only* apply to species, but can be applied to any population.

Macro vs. Micro Evolution

- Biologists and geneticists who study evolution at the micro level tend to see evolution as a gradual process, unpredictably random at a predictable rate over long periods of time (e.g., DNA mutations). Microevolution is observable.
- Macroevolution is unobservable but inferred based on observed microevolution and an incredibly diverse fossil record. Characterized by punctuated equilibrium, catastrophic events, relatively sudden evolution.

Note: Combining the two parallels the general Marxian theory of change.

Do Economies Evolve?

The Austrian View

- **Schumpeter's creative destruction** is an inherently evolutionary model, and the entrepreneur is an evolutionary agent.
- **von Mises and Hayek:** the capitalist economy developed its institutions in a quasi-rational fashion – a sort of spontaneous order out of chaos – and institutions and behaviors which work best survive and are adopted by others.

- **North** studied the emergence of institutions like private property rights, the scientific method, the ideology of the market, and the state. Information dissemination, transactions costs, and the free rider problem. Societies choose among available alternatives best solve their particular problems.
- **Alchian** argued that bankruptcy would lead to profit maximization by firms over time even if managers did not intend it. Firms must innovate, imitate, or die.
- **Buchanan** : political institutions like constitutional democracy may be a rational answer to problems which vex the individual, but its choices are not themselves rational. (Fits with social choice theory.)

- Economic evolution is not just an idea that economic and social change occurs over time; it is a theory about how and why those changes occur. It must include the four elements: variation, selection, transmission, and time.
- In practice, it is hard to distinguish it from simple incentive and learning, where people try different things and then choose what works best. (*This is actually something I have done research on*).
- One recent approach is that individual preferences can evolve, but individual choices adapt. Economists usually assume that preferences are just given. But if certain preferences lead to more success in mating, and if these preferences can be passed on to your kids, then over time we would see certain preferences become more likely.

Recent evidence about firm productivity...

- There is evidence that competitive market sectors tend to improve average productivity faster than protected, regulated, non-competitive sectors.
- There is also increasingly consistent evidence that while individual firms do change their productivity over time, the trend is not necessarily positive.
- Again, individual firms do not tend to become more productive, but groups of firms do.
- More productive firms grow, less productive firms shrink or go bankrupt, and the average is weighted by output share. So the weighted average improves even if firms on average do not.

Economic Evolution as a Metaphor for Selection

- Technologies, products, and institutions which are otherwise hard to change.
- If bankruptcy acts as an artificial selection mechanism to weed out investments which, in hindsight, were inefficient, then evolution occurs because we are then left only with relatively efficient choices.
- **Nelson** argues it explains many specific technologies (QWERTY keyboard, VHS, gasoline engine), but these were not necessarily more efficient.
- Increasing returns (positive-feedback loops) are not consistent with equilibrium systems.

- Evolution is thus path-dependent, co-evolutionary, and very non-deterministic.
- Economic evolution is inherently different from biological evolution. Individuals and firms can adapt and learn, while a species can only change over long periods of time from accumulated mutation and selection.
- The rational selection of institutions is always contextual. An economic system cannot simply be transplanted from one society to another and work as well. Perhaps such institutions must evolve on their own, and evolution is by nature a very slow process.

Applications to comparative economic systems:

- Economies which allow inefficient firms to go bankrupt are more likely to have faster economic evolution, while economies which prevent bankruptcy (perhaps because the state owns the firms) do not waste productive assets but also do not face evolutionary pressures.
- Economies which have more competition are more likely to evolve faster than those with less (this artificial selection, of course, is in addition to the improvement in managerial incentives that competition adds).
- Economies which are open to trade, finance, and interaction with other nations have both more variation and more competition. (Of course, economies with greater incentives to adapt may also find that learning and imitation occur more rapidly as well.)

If evolution is contextual, then different economies cannot be compared easily.

- An economy that works well in one context may not work well in another situation.
- Economies may work well in niches.
- This may determine whether economic systems will converge or diverge over time.
 - If one type of economic system consistently performs better, if one particular set of economic, political, and social institutions tends to lead to better economic performance, then over time economies may converge to this type of system.
 - If economies can find a niche, if societies can adapt to a contextual environment, then perhaps economies may continue to diverge.

The Marxist-Leninist Critique of Capitalism

- a) Early and Utopian Socialists
- b) Marx's view
 - basic theory of capitalism's demise
 - what comes after
 - some fundamental problems
- c) Anarchists and Revisionists
- d) Lenin's contributions to Marx's theory

Early Socialist Thinkers

- Jean-Jacques Rousseau (1712-1778) – the nobility of the primitive, idealization of communal ownership and production. "Man must seek to recover wholeness at a higher level of existence."
- Morelly's *Code de la Nature* (1755) – private property is the "parent of crime."
- François-Noël Babeuf (1760-1797) – advocated equal distribution of land and income, communism, and the possibility that a small elite could conspire to overthrow an undesirable government. Executed.
- Count Henri de Saint-Simon (1760-1825) – fought in U.S. revolution, advocated importance of workers, an end to private property and inequality, and rational state planning. Businessmen and industrial leaders would take the place of the Church in controlling society.

“Utopian Socialists”

- ❖ Robert Owen (1771-1858) and New Lanark: he made a fortune by treating his workers very well, and creating a “village of cooperation.”
“Man is the creature of circumstance.”
- ❖ Charles Fourier (1772-1837) – advocated social organization of phalanxes of common ownership and voluntary communal work. Brook Farm, Oneida, et cetera.
- ❖ John Stuart Mill (1806-1873) -- one of the best economists of his day, and an advocate of social justice through reform and government intervention (separability of production and distribution). Capitalism still reflected the feudal past, and had untapped potential.

Karl Marx’s view

- History is the story of class struggle.
- Capitalism is a system of exploitation of one class of people by another. Capitalist production is alienating.
- Primitive capital accumulation led to the emergence of the bourgeoisie, and the end of Feudalism led to the transformation of the serfs into the proletariat under the wage labor system.
- Capitalism is an engine of progress through capital accumulation, but in addition to being exploitive it also is chaotic, unstable, and wasteful – producing products that people don’t need and idling potentially productive capital and labor.
- Smith’s labor theory of value is assumed.

Basic Marxian Theory

Marx’s theory of surplus value:

Surplus value = production value – wages – capital costs (a transfer of value)
 $V = W + C + S$
long-run profit rate $p = S / (W+C)$
rate of exploitation $r = S / W$
organic composition of capital $q = C / (W+C)$
So $p = r (1-q)$, and $dp/dq < 0$

Marxian Theory of Capitalism's Demise

Process:

- Competition among capitalists leads to accumulation.
- Accumulation leads to falling profit rate.
- Rate of exploitation rises to keep profits up.
- Reserve Army of the Unemployed keeps workers cooperative.
- Government is the agent of the capitalist class.
- Nationalism, war, sexism, and racism are tools of capitalism.
- Crises of underconsumption and overproduction.
- Class consciousness and revolution.

What happens after the revolution?

- Dictatorship of the Proletariat
- Socialism: government acts in the interest of the proletariat to eliminate capitalism. Markets replaced by more rational planning. State ownership replaces private ownership. Workers become more productive, and scarcity is eliminated.
 - From each according to his ability, to each according to his work
- Eventual withering of the state, complete change in superstructure to eliminate vestiges of capitalism.
- Emergence of Advanced Communism: self-organizing and socially-interested. Markets, planning, money, classes, and government all no longer necessary.
 - From each according to his ability, to each according to his need.

Marxian theory continued

A neat theory of the contradictions of capitalism, with its own contradictions:

1. Do capitalists act in their own interest or that of their class? Accumulation versus the Reserve Army.
2. Capital accumulation does not lead to falling profit rates (though even if it did, this could be explained by Ricardo's principle of diminishing returns).
3. Capital accumulation does not lead to falling wage rates.
4. The revolution did not come first to the most advanced capitalist economies.
5. Value cannot simply come from labor, or management, capital, entrepreneurship, luck, et cetera would not matter. Instead, it comes from scarcity – what people are willing to give up on the margin to have it.

Revisionists

Influential thinkers in the Communist Movement (e.g., the German SDP) who eventually came to disagree with Marx. For example:

- Eduard Bernstein – Capitalism is reforming and may gradually eliminate its many evils, its breakdown is not inevitable, and socialism requires a voluntary choice.
- Mikhail Tugan-Baranovsky – Marxist theory is incorrect, overproduction is not a problem and there is no inherent law of falling profits. Socialism requires “enlightened work.”
- Karl Kautsky – First a critic of Revisionists, then came to agree. Argued that working class could achieve a balance of power through democracy.

Anarchists

- Bakunin – all government power is inherently corrupt.
- Proudhon – What is Property?

Lenin's Contributions to Marxism

Basic Theories:

- Uneven Development
- Monopoly Capitalism
- Imperialism
- The “Weak Link”

In 1907, he wrote What is to be done?

Party the “vanguard of the proletariat”

Revolutionaries must be secretive, not open

Split between Bolsheviks and Mensheviks in Russian SDP

In 1917, he led the Bolshevik Revolution in Russia, which overthrew the Provisional Government in Petrograd (St. Petersburg, a.k.a. Leningrad) that tried to govern Russia after the Czar abdicated, and created the first socialist state.
