

THE ECONOMIC THEORY OF  
CAPITALISM

- A. The Theoretical Efficiency of the Market
- B. The Marxist-Leninist Critique of Capitalism
- C. Market Failure, Government Intervention, Public Failure and the Problem of Social Choice
- D. The Institutions of a Market Economy
- E. Globalization and the Impact of International Trade & Finance

---

---

---

---

---

---

---

---

A. The Theoretical Efficiency of the Market

- Alfred Marshall – partial equilibrium, competitive markets, and efficiency
  
- Leon Walras – competitive general equilibrium conditions: find  $P$  vector such that for each and every one of  $n$  markets, if  $p > 0$ ,  $Q_s = Q_d$ ; if  $p = 0$ ,  $Q_s \geq Q_d$ . Only  $n-1$  prices are necessary, since prices are relative.

---

---

---

---

---

---

---

---

“Perfect Market” conditions

- Perfect Competition (PC) – no increasing returns, many buyers and sellers of homogenous products, price takers, not price makers.
- Perfect Information (PI) – buyers and sellers know all they need to know about what they are buying and selling to make the right decisions.
- Complete Markets (CM) – no externalities/spillovers or public goods, no transactions costs, “thick” markets, insurance and futures markets included.

---

---

---

---

---

---

---

---

## Pareto Optimality

- If we can make a change from the current state that makes one person better off without making another person worse off, then this is a Pareto Improvement.
- If a Pareto Improvement is not possible, then the current state is Pareto Optimal.
- Kaldor's compensation criterion – can winners afford to compensate losers?
- This implies efficiency – static and dynamic

---

---

---

---

---

---

---

---

## The Existence Theorem

*There exists at least one set of (n-1) relative prices (a vector P) that yields competitive general equilibrium (CGE).*

- A competitive general equilibrium is theoretically possible, but finding it implicitly requires perfect information and perfect competition.

---

---

---

---

---

---

---

---

## The Efficiency Theorem

*If markets are complete, then any competitive general equilibrium is Pareto Optimal even under the strict Kaldor Criterion.*

- A conditional proof of the Invisible Hand: perfect markets are perfectly efficient.

PI+PC => CGE  
CM+CGE => PO (KCC)

- Real name is the "First Fundamental Theorem of Welfare Economics."

---

---

---

---

---

---

---

---

## The Redistribution Theorem

*Any distribution of income can result from any competitive general equilibrium under an appropriate redistribution of resources, unless there are sufficiently large increasing returns.*

- The distribution of income from a market economy is not inherently unequal.
- Under perfect competition, your income is determined by the resources you provide to the market, and the prices set for them by the market.
- Messing with prices may prevent CGE and thus Pareto Optimality. So, can you redistribute income without creating inefficiency?  
This theorem says yes, by redistributing resources themselves without messing with prices.
- Real name is "The Second Fundamental Theorem of Welfare Economics."

---

---

---

---

---

---

---

---

Perfect free markets are perfectly efficient, but are free markets ever perfect?

- Fundamentally, all problems with the first three theorems come from violation of the three perfect market conditions: imperfect competition (including increasing returns), imperfect information, or incomplete markets. But that is the real world.
- Compensation may be potential in the Kaldor Criterion, but for it to really happen would require perfect information. Similarly, redistribution of resources without perfect information would necessarily mess with prices (e.g., taxes, subsidies, et cetera).

---

---

---

---

---

---

---

---

So why teach the three welfare theorems?

These three theorems (existence, efficiency, and redistribution) are very powerful proofs of the potential efficiency of market economies, and the separation of efficiency and equity (Mills).

These three theorems point to the sources of economic problems, in the violation of the three conditions. Economists promote policies to improve efficiency by addressing market failures.

These three theorems affect how many economists think. The disagreements of economists are often about the relative magnitude of the effects of market failures.

---

---

---

---

---

---

---

---

If perfect market conditions are not met...

Can we still compare the relative efficiency of different states of the economy?

- Theorem of the Second Best (#4): *There is no second-best.*
  - Suppose State 0 has no market failures, State 1 has 1 distortion, State 2 has 2, and so on. State 0 is efficient (PO under KCC). Can we compare the rest?
  - No.
  - The possibility of offsetting distortions.
  - The lesson of humility.
  - The need for measurement and study.

---

---

---

---

---

---

---

---

## The Austrian Critique

- Ludwig von Mises: markets are necessary to determine the values of resources such as capital and labor, and the value of the goods they produce.
- Friedrich A. Hayek: The neoclassical mathematical approach is not very helpful. Of course free markets are not perfect, and markets are not perfectly efficient. But market economies are relatively efficient compared to any other economy, in part because of how markets use and convey information (e.g., prices, incentives and valuation). Information is impossible (infinitely expensive) to centralize.

---

---

---

---

---

---

---

---

## Creative Destruction

Joseph Schumpeter was once the Austrian finance minister and later Harvard economics professor, and very influenced by the Austrian economists.

- Fundamental condition of financial development.
- The role of the Entrepreneur.
- The process of Creative Destruction in producing technological progress and economic growth.
- Neoclassical focus on efficiency often misplaced. Static inefficiency may be necessary for dynamic efficiency. Future monopoly profits may be the (temporary) reward for innovation.

---

---

---

---

---

---

---

---

### What if markets are not complete?

Coase's Theorem (#5): *If property rights are well-defined and enforceable, and transactions costs are sufficiently low, then any externality can be internalized.*

Some take this to mean that free markets can solve their own inefficiencies.

Others interpret this theorem as pointing to the underlying conditions (transactions cost, poorly-defined property rights) preventing their solution.

---

---

---

---

---

---

---

---

### B. 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," avarice is the root of all evil.
- 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.” (His son played a major role in passage of 14<sup>th</sup> Amendment.)  
“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

- Anarchy – a philosophy rejecting all authority, religious or political. Society creates a spontaneous order without government.
- Mutualists, Individualists, and Collectivists.
- Pierre-Joseph Proudhon (1840) – What is Property?
- Henry David Thoreau: “the inevitability of self-government accompanied by atrophy of the State.”
- Mikhail Bakunin – all government power is inherently corrupt. Opposed Marx in First Internationale (1872) on issue of participation in elections.

---

---

---

---

---

---

---

---

### Lenin’s Contributions to Marxism

#### Basic Theories:

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

In 1902, he wrote What is to be Done? (title based on 1863 work by Nikolai Chernyshevsky, which influenced those who assassinated the reforming Czar Alexander II).

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.

---

---

---

---

---

---

---

---

C. Market Failure, Government Intervention, and the Problem of Social Choice

- *Market failure* is when free markets fail to be efficient due to violation of the three conditions. Market distortions may result from market failure, or from government intervention (markets aren't free).
- Monopolies, unions, externalities, overuse of natural resources, contagion, thin markets, moral hazard, adverse selection, principal-agent problems, fraud, et cetera, are all examples of market failure.
- Taxes, subsidies, regulation, et cetera, are market distortions, but *not* market failures.

---

---

---

---

---

---

---

---

*Theoretical Justifications for State Intervention*

1) Fixing Market Failures:

- 1) no PI – consumer safety, fraud, insider trading, ...
- 2) No PC – antitrust, anticompetitive behavior, monopoly regulation, free trade, ...
- 3) No CM – provide or subsidize public goods, Pigouvian taxes/subsidies to offset externalities, regulation, create markets where they don't exist, define and enforce property rights through legal system, reduce transactions costs, ...

What are public goods?

- nonexcludable benefits
- nonrivalrous consumption, so  $MC=0$

**Free rider** problem

So, what is a public good? Grey areas.

---

---

---

---

---

---

---

---

2) Social Cooperation:  
The Prisoner's Dilemma Model

Basic model: Nash equilibrium is not the optimum. Some individuals take advantage of others, others try to avoid being taken advantage of, and result is that everybody is worse off.

Many, many applications.

Rational people can cause social irrationality; self-interest can make everybody worse off.

The role of the mob (collusion) as a metaphor for state.

When is the prisoner's dilemma in society's interest, and when is it not? Types of competition.

The problem of "acting moral in an immoral world."

---

---

---

---

---

---

---

---

### 3) Macroeconomic Stability

- Fundamentally, this is an information problem.
- Specialization and exchange, especially with use of financial and monetary systems, require faith.
- Say's Law – that supply creates its own demand – requires perfect information and perfectly flexible prices (full-employment model).
- Prior to the Great Depression, all economics was micro.
- After the Great Depression, Keynes's general theory argued that Say's Law is backwards.
  - Inherent instability of investment: "animal spirits"
  - Ineffectiveness of monetary policy in a recession, especially under price deflation (ZLB).
  - Need for countercyclical fiscal policy, government intervention to save capitalism from itself.
  - Government budget should be more or less balanced over the business cycle, in deficit during recessions, in surplus during booms.

---

---

---

---

---

---

---

---

### Macroeconomics after Keynes

- Milton Friedman concluded that Great Depression was caused by monetary negligence of the Federal Reserve. Bernanke has more or less concurred.
- Monetarists emphasize importance of money's role in destabilizing the economy, and promote rule-based policies rather than unpredictable government intervention.
- Rational expectations hypothesis – people are correct "on average" in predicting the future, market prices embody all available information, and government can only stimulate economy by fooling everyone, all the time. Manipulating expectations creates instability.
- Problem of "hysteresis" – delay in recovery, long-term effects from short-run causes (unions and gov't policy).
- Price rigidities (New Keynesian) due to implicit/explicit contracts, oligopolies, menu costs, gov't policies, etc.

---

---

---

---

---

---

---

---

### Other justifications

- 4) Arranging compensation arrangements
- 5) Equity: social safety net, equal opportunities, redistribution of resources or income
- 6) Merit Goods and nonmarket preferences – culture, religion, values, whatever: markets induce social change and undermine traditional values.
  - Public goods vs. merit goods – are the benefits measurable?
  - *Market brutality vs. market efficiency*

---

---

---

---

---

---

---

---

If intervention is theoretically justifiable, can the state intervene efficiently?

The state's objectives may be in its own interests, not in the public interest.

- Predatory state vs. the social contract.

Olson's criminal model:

- Roaming vs. stationary bandit
- Long-term vs. short-term governments
- Autocracy vs. oligarchy vs. democracy
- Government control over its agents (Zaire vs. Indonesia)

---

---

---

---

---

---

---

---

Can the state intervene efficiently?

Even if the state is a social contract...

- Reliable and consistent determination (social choice) of the social interest is not possible.
- Government also lacks perfect information.
- Politicians have their own self-interest.
  - Even well-meaning politicians in a democracy must get elected, get re-elected, and extend their power.
  - Pelzman's model of porkbarrel, logrolling.
- Agencies are hard to manage: multiple and conflicting goals, risk avoidance, bureaucratic capture, agency inertia (sunset problem).
- Taxes, subsidies, and regulations can create deadweight loss and inefficiency, which offsets benefit of providing public goods.
- In capitalist economies, government is responsible for residual problems are most difficult to solve.
- Productivity tends to grow more slowly in services than other areas, leading to "cost disease" in which government share of income rises.

---

---

---

---

---

---

---

---

The Problem of Social Choice

Condorcet's voting paradox

- Person 1: A > B > C
- Person 2: B > C > A
- Person 3: C > A > B
- Majority vote: A > B > C > A
- Majority voting is inconsistent, even cyclical

Example of 1860 election: Lincoln, Douglas, Bell, and Breckenridge. D>L, L>Bl, Bl>Bk, D>Bk, L>Bk, but also Bl>D.

Importance of Voting Rule

- If we used a run-off system, D>L. With rank-order voting, D>Bl>L>Bk. But instead, we used winner-take-all plus the electoral college.
- Example of 1824, 1876, 1888, and 2000 elections – winner of majority/plurality does not always win the election.

---

---

---

---

---

---

---

---

## Is a better voting rule possible?

A social choice rule should be able to convert any set of individual preferences into a social choice ordering. This ordering should be:

1. **Consistent:** (a) transitive; (b) independent of irrelevant alternatives.
2. **Decisive:** (c) Pareto rule (if A is preferred to B by at least one person and B is preferred by nobody, then society prefers A over B).
3. **Fair:** (d) nondictatorial; (e) preferences are not imposed.

---

---

---

---

---

---

---

---

## Arrow's General Impossibility Theorem

*"If we exclude interpersonal comparisons of utility, then no social choice rule can satisfy these conditions." -- Kenneth Arrow*

- ✓ No voting rule can be dependably consistent, decisive, and fair. (examples of majority rule, consensus, dictatorship).
- ✓ Society's choices are not reliably rational, even if everybody in society is rational and well-informed.
- ✓ Proof works by demonstrating how any coalition can be split on the right issue.

---

---

---

---

---

---

---

---

## How does government policy emerge?

- Losers innovate policies to split governing coalitions and win (Southern strategy, Clinton and the economy). Policy can thus cycle wildly.
- Sophisticated parties manipulate the agenda or change the question (Powell amendment, Lincoln Douglas debates).
- Madisonian Liberalism: Voting still puts a check on government policies.

Winston Churchill: "Democracy is the worst system, except for all the others."

---

---

---

---

---

---

---

---

## Mancur Olson's Coalition Theory

- Both informed voting and participation in interest groups (coalitions) are costly.
- Size of coalitions increases their costs of organization and probability of success.
- Distributional coalitions: limited, exclusive benefits that fall with size of coalition. They tend to support policies that are less socially efficient (see Prisoner's Dilemma). DCs may build up over time.
- Encompassing coalitions: non-exclusive benefit. Free rider problem and the role of ideology.
- Distributional coalitions (special interest groups) tend to be better organized, more effective.
- Political structure can affect the success of political coalitions.

---

---

---

---

---

---

---

---

## Consider a simple example

Outcome A: 1 million people have \$10,000 each.

Outcome B: 100 people have \$1,000,000 each, 999,900 people have \$9,900 each.

A is not only more equal than B, it is also more efficient (PO under KCC) since \$10 billion > \$9,999,010,000.

If both information and voting was costless, A would always beat B.

But in Olson's theory, the 100 winners in B would form a DC to get it, while the other 999,900 would not bother to even vote.

Result: Society "chooses" an inefficient outcome!

---

---

---

---

---

---

---

---

## Other Examples

- Free trade is an encompassing issue, while protection is distributional.
- Cartels, oligopolies, monopolies, unions, et cetera.
- Price rigidity may result from unwillingness of firms to compete, and this makes recessions worse.
- Herbert Giersch's Eurosclerosis: stagnant growth resulting from excessive regulation, lack of creative destruction, excessive cost of hiring, firing, etc.

---

---

---

---

---

---

---

---

### In sum,...

- Perfect markets are perfectly efficient, but markets aren't perfect. Fixing specific market failures may not actually make the economy more efficient.
- Well-intentioned governments may intervene to correct market failures or address other problems, but government intervention may also fail (public failures) for a variety of reasons.
- To make it worse, governments may act in their own interests, rather than those of society in general.
- Even governments that want to act in society's interests cannot determine what society actually wants.
- Policy is messy and indeterminate, subject to political manipulation and the desires of powerful special interests.
- Society's choices, like those of any group, are not likely to be rational even if individuals choices are.

---

---

---

---

---

---

---

---

### D. The Institutions of a Market Economy: The Case of the United States

- Factors Affecting U.S. Development
- Business Structure
- Labor Markets
- Financial markets
- Governmental institutions:
  - Role in Allocation and Production
  - Role in Distribution
  - Legal System
  - Tax System
  - Effect of Government on Growth, Stability
  - Government Debt and Savings
  - Trade Policy

---

---

---

---

---

---

---

---

### Factors Affecting U.S. Development

*Natural Environment:*

- Rich in natural resources.

*Cultural Factors:*

- Strong "protestant ethic" of Calvinism, Lutheranism; Horatio Alger mythology.
- Philosophy of individualism, anti-government attitudes.
- Immigration, slavery, and expansion led to "melting pot" issues – problems of discrimination, attitudes towards redistribution, now a growing tolerance of diversity.

*Historical Factors:*

- The "Frontier" – "free" natural resources, rural wage parity, opportunity for wealth.
- North vs. South – tensions over trade vs. protectionism, role of federal government, industry vs. slavery. Civil War decided in favor of federal power, protectionism, and industry.

---

---

---

---

---

---

---

---

## Business Structure

- Agriculture majority of GDP until 1870, largest sector until 1900.
- Not the birthplace of the industrial revolution, but economy characterized by increasing innovation, especially interchangeable parts, mass production techniques, and retail.
- Industry replaced by services in 1950s.
- Legal development of the limited liability corporation, and innovation of new corporate structures (e.g., the U-form and M-form of large conglomerates). Corporations controlled by stockholders through board, relatively independent of banks.
- During the "Gilded Age" – industrial and retail expansion, age of monopolies, trusts, and "Robber Barons" – "The Public be Damned!"
- Antitrust Movement – Sherman Antitrust Act (1890), Clayton Act (1914). Slowing concentration ratios for manufacturing 1899-1958, increasing competitiveness through 1980s, greater tolerance of mergers, less antitrust enforcement, after 1980.
- Regulation of Natural Monopolies (ICC, FCC, PUCs, et cetera).
- Most firms are sole proprietorships, but most output comes from corporations. Majority of labor force still works in firms smaller than 100 employees.

---

---

---

---

---

---

---

---

---

---

## Labor Markets and Unions

Relatively market-based labor market, but still there is regulation: low minimum wage (relative to history, other developed countries), payroll taxes, overtime regulation, layoffs relatively easy, unemployment insurance, worker safety (OSHA).

### Rise of Unions:

- In 1880s, unions radical and unsuccessful – 8-hour movement, Knights of Labor, Haymarket riots.
- AFL (1886) founded on Gompers' "pure and simple unionism." CIO split in 1935, later rejoined.
- Norris-LaGuardia Act (1932) – full freedom of association, self-organization, et cetera.
- Wagner Act (1935) – NLRB, union of workers' choice, collective bargaining, banned unfair labor practices.
- Taft-Hartley Act (1947) passed over Truman's veto – cooling-off period, Federal mediation, no right to strike for government employees.
- Unions pushed for other labor market regulation – minimum wages, OSHA, et cetera.
- Unions declining in labor share since 1950s.

---

---

---

---

---

---

---

---

---

---

## U.S. Financial Markets

- Anglo-American "model" of separating debt and equity. Banks and borrowers are relatively independent.
- Banking sector relatively deregulated.
- Banks very consumer-oriented, relatively high (and growing) consumer debt: mortgages, credit cards, other loans.
- Low personal savings rate.
- Explicit deposit guarantees through FDIC, FSLIC.
- Higher money velocity (i.e., relatively less money demand) than Japan, France, or Germany.
- High financial ratio: much higher stock market capitalization, large public and private bonds market, etc.
- U.S. Federal Reserve System created in 1913: quasi-independent monetary policy, lender of last resort, lead regulator over lending practices.
- Financial Policy:
  - Liberalization vs. repression
  - Prudential regulation, contagion problems, financial crises
  - Central bank is chief regulator, lender of last resort in U.S.

---

---

---

---

---

---

---

---

---

---

## Government Institutions

### Role in Allocation and Production:

- Military – Federal government tends to be sole purchaser.
- Highways – Federal government provides grants to states.
- State production – limited to education, post, administration.
- State ownership – limited to public lands, military bases, government buildings.
- Police, fire protection, education, etc. mostly provided by states.
- Health care largely private (except for Medicare, Medicaid as single payers, V.A. as provider).
- Product Market Regulation – pricing (e.g., utilities), consumer safety.
- Environmental Policy – natural resource use, endangered species, air and water quality.

### Role in Distribution:

- Welfare reform in 1990s limited most poverty subsidies.
- Redistribution in-kind: public housing, food stamps.
- Social Safety Net: Social Security, Medicare are "pay-as-you-go."
- Limited unemployment insurance.
- Political preference for "tax expenditures."

## Evolution of U.S. Government

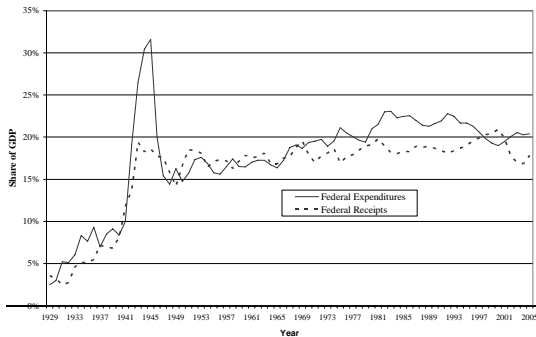
- Federal government small, policies very laissez faire until Civil War. Import duties primary revenue.
- Federal land grants to railroads, colleges.
- Populist movement – ICC, free silver movement.
- Progressive Era – trustbusting, FDA (*The Jungle*), Federal Reserve Bank, income tax during WWI.
- Great Depression – Roosevelt's "New Deal" increased role and responsibility of government, including Social Security.
- Truman's Full Employment Act of 1946 gave federal government responsibility for macroeconomics.
- World War II, Korean War, and Cold War – more powers to federal government.
- Johnson's Great Society Programs – Medicare, War on Poverty underfunded due to effort to hide costs of Vietnam War. Rising inflation during 1970s.
- Environmental protection (Nixon).
- Deregulation Era – began with airlines (Carter, 1978), then expanded under Reagan and continued through Clinton.

## U.S. Government Spending over Time

| Average Share of GDP | Total Federal Spending | Net State and Local Spending | Total Govt Spending | Total Govt Surplus |
|----------------------|------------------------|------------------------------|---------------------|--------------------|
| 1929-1932            | 4.0%                   | 7.2%                         | 11.2%               | 0.4%               |
| 1932-1940            | 8.0%                   | 7.2%                         | 15.2%               | 0.0%               |
| 1941-1945            | <b>23.5%</b>           | 4.2%                         | 27.8%               | <b>-6.2%</b>       |
| 1946-1950            | 16.2%                  | 4.9%                         | 21.1%               | 0.7%               |
| 1951-1960            | 16.6%                  | 5.6%                         | 22.2%               | 1.7%               |
| 1961-1970            | 17.8%                  | 7.7%                         | 25.4%               | 0.9%               |
| 1971-1980            | 19.9%                  | 9.3%                         | 29.2%               | -1.3%              |
| 1981-1985            | <b>22.5%</b>           | 9.7%                         | <b>32.2%</b>        | <b>-3.5%</b>       |
| 1986-1990            | 21.8%                  | 10.4%                        | 32.1%               | -2.7%              |
| 1991-1995            | <b>22.1%</b>           | <b>10.9%</b>                 | <b>33.0%</b>        | <b>-3.6%</b>       |
| 1996-2000            | 20.0%                  | 10.4%                        | 30.4%               | 0.7%               |
| 2001-2005            | 20.1%                  | 10.7%                        | 30.9%               | -2.4%              |

## Growth of the federal government

Figure 1: Federal Government's Share of the Economy




---

---

---

---

---

---

---

---

---

---

---

---

## Legal System

- ❖ 1787 Constitution – longest-lived constitutional democracy
  - ❖ federal system
  - ❖ three-branched government, bicameral legislature
  - ❖ system of political checks and balances
  - ❖ experiment in individual rights and self-government
- ❖ Legal system derived from British common law
  - ❖ Reliance on precedent, evidence, equality before the law
  - ❖ Different standards for criminal and civil law
  - ❖ Property rights – formal rights follow actual use
  - ❖ Public enforcement of private contracts, compensation, bankruptcy
- ❖ Accounting and financial disclosure
- ❖ Eminent Domain – public use of private property, with compensation
  - ❖ Controversy over compensation for zoning, regulation

---

---

---

---

---

---

---

---

---

---

---

---

## Tax System

- Taxes are necessary to fund public goods, but taxes and subsidies create a deadweight loss. Pigouvian taxes may offset market failures.
- Personal income tax, payroll taxes currently account for almost 90% of federal revenue.
- State and local governments depend mostly on property taxes, sales taxes – tend to be regressive.
- Redistribution of income – prior to 1964, 1981, 1986, income tax was significantly progressive.
- Currently, maximum federal tax rate = 35% (was 40%), social security and medicare contributions capped (effective marginal federal rate = 40% at \$90K, 35% at \$350K), some states have income taxes.
- Capital gains and many dividends taxed at lower rate, with corporate double taxation of dividends.

---

---

---

---

---

---

---

---

---

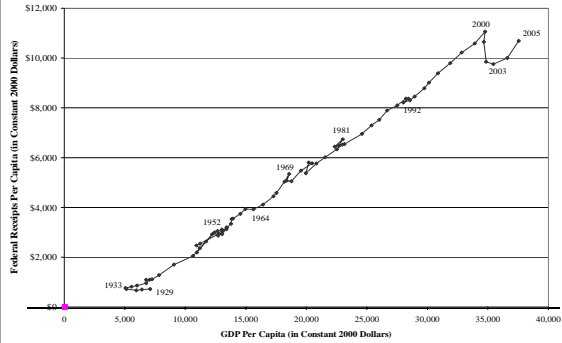
---

---

---

## Taxes have risen with income (until just recently)

Figure 2: The Relationship between Income and Taxes




---

---

---

---

---

---

---

---

---

---

## Stabilization Policy

U.S. Full Employment Act makes federal gov't responsible for economic stability.

### Fiscal Policy:

- Increasing overall spending by increasing government expenditures, cutting taxes.
- Keynesian countercyclical demand management, should be balanced over business cycle.
- Budget deficits lead to more debt, which leads to more interest expenditures.
- Budget deficits may cause more foreign borrowing, trade deficits offset stimulus effect.

### Monetary Policy:

- Money supply affects willingness to spend, depends on private deposit and lending cycle.
- Central bank increase bank reserves by buying assets (government bonds), can also affect bank's willingness to lend.
- Seigniorage – central banks lend government with new money, so small deficits can be paid for if people are willing to hold it.
- If central bank lends too much, of course, inflation results.

---

---

---

---

---

---

---

---

---

---

## Growth and Inflation by Period

| Annualized Rates | Real GDP | Std. Dev. | Real GDP Per Capita | Inflation | Std. Dev. |
|------------------|----------|-----------|---------------------|-----------|-----------|
| 1820-1910        | 3.9%     | 4.9%      | 1.5%                | 0.1%      | 6.6%      |
| 1910-1920        | 2.5%     | 6.5%      | 1.1%                | 8.0%      | 7.7%      |
| 1920-1930        | 2.7%     | 6.2%      | 1.1%                | -2.1%     | 4.8%      |
| 1930-1940        | 2.7%     | 8.6%      | 1.2%                | -1.6%     | 5.8%      |
| 1940-1950        | 5.5%     | 9.6%      | 3.3%                | 5.4%      | 4.0%      |
| 1950-1960        | 3.5%     | 3.1%      | 1.7%                | 2.4%      | 1.8%      |
| 1960-1970        | 4.2%     | 2.1%      | 2.9%                | 2.7%      | 1.6%      |
| 1970-1980        | 3.2%     | 2.6%      | 2.1%                | 7.0%      | 1.9%      |
| 1980-1985        | 3.2%     | 3.3%      | 2.3%                | 3.4%      | 2.6%      |
| 1985-1990        | 3.3%     | 0.8%      | 2.3%                | 2.7%      | 0.7%      |
| 1990-1995        | 2.5%     | 1.4%      | 1.2%                | 1.8%      | 0.6%      |
| 1995-2000        | 4.1%     | 0.7%      | 2.9%                | 1.3%      | 0.4%      |
| 2000-2005        | 2.6%     | 1.3%      | 1.5%                | 1.8%      | 0.4%      |

---

---

---

---

---

---

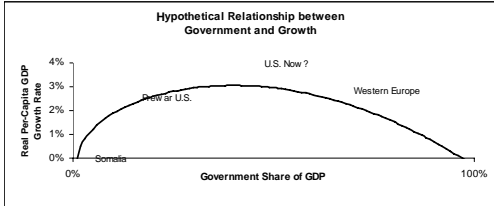
---

---

---

---

## What is the relationship between government and growth?



The relationship between government and growth is probably shaped like an inverted U. Too much or too little government is bad for growth. It is not clear that the U.S. is on the downward-sloping portion.

---

---

---

---

---

---

---

---

---

---

## International Trade

- Conflict between North and South over trade policy:
  - North – Hamilton’s infant industry argument.
  - South – Plantation exports at low cost.
- After Civil War, policy became increasingly protectionist, ending with Smoot-Hawley Tariffs.
- Roosevelt, Cordell Hull, and the move to Free Trade: Reciprocal Trade Agreements Act, Bretton Woods, Havana Charter, GATT.
- Kennedy Round and exceptions to agriculture, multifibres: Distributional vs. Encompassing interests.
- Strategic trade policy goals changed from before and after Cold War.
- Rising trade, increasing globalization, and competitive checks on monopoly power of large corporations.
- Factor price equalization and the backlash against trade.

---

---

---

---

---

---

---

---

---

---

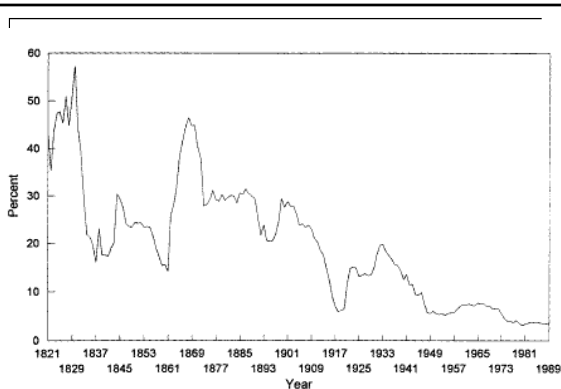


FIGURE 1. AVERAGE U.S. TARIFF RATES, 1821-1989

---

---

---

---

---

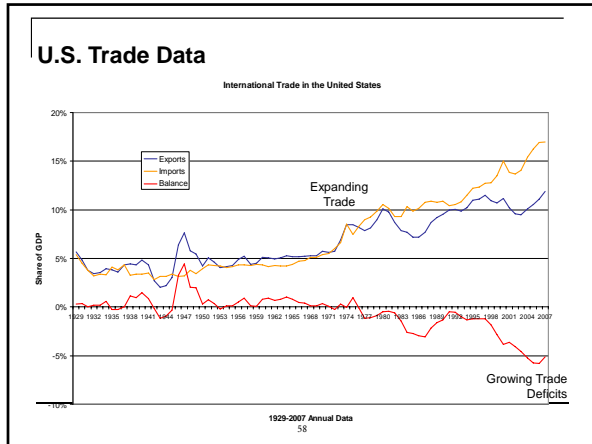
---

---

---

---

---




---

---

---

---

---

---

---

---

---

---

### U.S. Savings and Investment (2004)

| Share of 2004 GDP | Gross Savings |                         | Gross Investment | Capital Consumption | Net Investment |
|-------------------|---------------|-------------------------|------------------|---------------------|----------------|
| Household         | 1.3%          | Residential             | 5.7%             | 2.0%                | 3.8%           |
| Corporate         | 13.7%         | Nonresidential          | 10.7%            | 8.3%                | 2.4%           |
| Federal govt      | -2.7%         | Federal govt            | 0.9%             | 0.8%                | 0.1%           |
| S&L govt          | 1.1%          | S&L govt                | 2.3%             | 1.2%                | 1.2%           |
| Foreign           | 5.6%          | Total                   | 19.6%            | 12.2%               | 7.4%           |
| Gross Savings     | 19.0%         | Statistical Discrepancy | -0.6%            |                     |                |

Gross I = Sp+Sg+Sf, Net I = Gross I – Depreciation (cap. con.)  
 Domestic Savings much less than Investment:

- High Private Consumption: 70% of GDP.
- Investment in new residential housing.
- Rising federal government deficits.
- Corporate savings relatively high.
- Large trade deficits offset by foreign savings inflows.

---

---

---

---

---

---

---

---

---

---




---

---

---

---

---

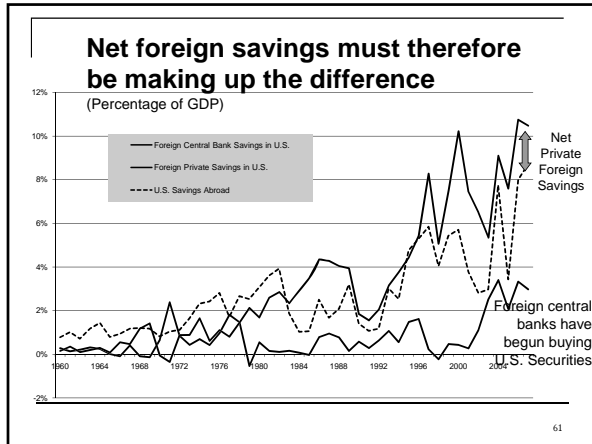
---

---

---

---

---




---

---

---

---

---

---

---

---

---

---

### Why is this a Problem?

- Foreigners now own over half of U.S. Federal Debt.
- Americans consumption is high, so imports are high.
- Foreign savings keeps Dollar high → fewer exports.
- Looming retirement problem:
  - "Baby boom" retires, federal government treats current FICA surplus as government revenue, so "true" federal budget deficit is much higher.
- Speculative bubbles in stock market, then real estate.
- Markets currently still expect future depreciation of Dollar (oil futures high).

Scary Scenario (from my 2005 lecture):  
 Trade deficits, other concerns → depreciation of Dollar → slowing foreign savings inflows → rising interest rates → rising government interest expenditures, decline in private asset values → popping bubble, declining private wealth and consumption, rising government deficits, loss of faith in ability of federal government to repay, further depreciation of Dollar, inability to meet social security and medicare commitments.

---

---

---

---

---

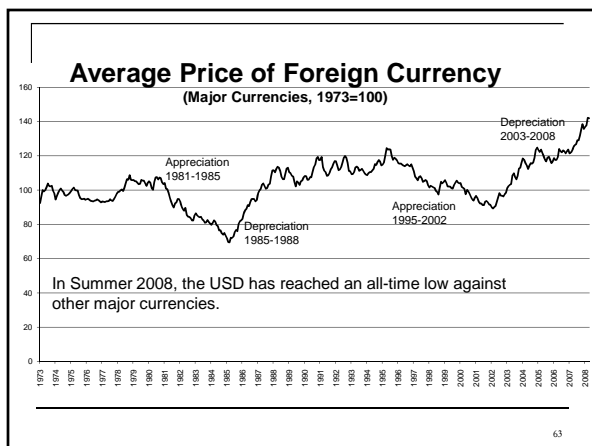
---

---

---

---

---




---

---

---

---

---

---

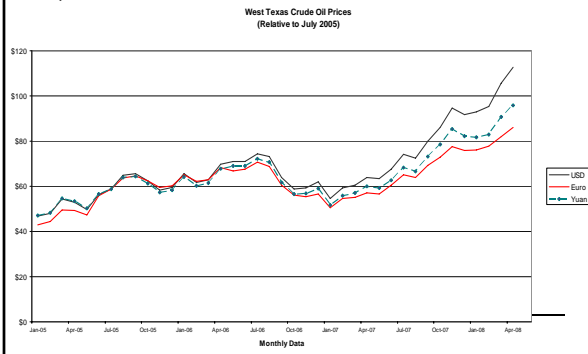
---

---

---

---

One effect is that oil is becoming more expensive for us, relative to the rest of the world.




---

---

---

---

---

---

---

---

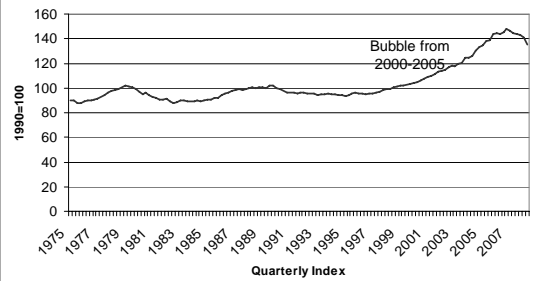
---

---

---

---

U.S. Housing Price Index  
(Adjusted for CPI Inflation)




---

---

---

---

---

---

---

---

---

---

---

---

## E. Globalization

### What is globalization?

- Economists focus on free trade in goods, services, labor, and capital, and the institutional rules that make this possible between (rather than just internal to) countries.
- There are also issues of cultural homogenization (e.g., a "race to the bottom" of a mass consumption society). Examples of baby milk powder, McDonald's, and clean bathrooms.
- Supporters of globalization usually assume perfect competition, while critics of it often argue that most trade tends to be controlled by large corporations. But trade would also lead to competition between large corporations in different countries that makes it harder for them to earn monopoly profits.

---



---

---

---

---

---

---

---

---

---

---

---

---

### From the Lecture on the Neoclassical Model

**International trade is particularly important because:**

- Specialization and exchange according to comparative advantage improves efficiency.
- International finance is just trade in assets, rather than trade in goods, with the same results.
- 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).

---

---

---

---

---

---

---

---

### There are other relevant models:

- In the Leninist model, international trade and finance is an engine of capitalist exploitation and Imperialism. The popular version of this in the 1970s was called Dependency Theory, which focused on core and periphery. Newer theories have focused on the power of the multinational corporation relative to the government in third world country.
- Free trade is a prisoner's dilemma, where protectionism for each sector is the Nash equilibrium.
- In Olson's coalition theory, free trade is an encompassing issue, but protectionism is a distributional issue.
- In economic evolution, free trade leads to more competition and initially more variation, so this should lead to faster evolution. If this leads to convergence, of course, then worldwide variation will fall over time.
- Economists argue that protectionism gives more opportunities for corruption. But corruption may also allow a minority to inefficiently overexploit export natural resources owned by a majority with weak property rights.

---

---

---

---

---

---

---

---

### Thomas Friedman's *Lexus and the Olive Tree*

Friedman is a journalist, not a scholar. He has not read most of prior original work on this subject, but he has written an intelligent, enthusiastic, interesting and controversial book.

- Argument that Globalization is THE new world system. Old system was the Cold War between the U.S. and the U.S.S.R.
- Argument that future conflicts will primarily be between those who wish to hold on to their "ancient forces of culture, geography, tradition, and community" and the increasingly fast-paced, market-oriented, efficiency-focused, technologically-driven, and increasingly global economy. (Barber's *Jihad vs. McWorld*).

---

---

---

---

---

---

---

---

### More on Thomas Friedman

- Globalization is not unprecedented, but it was interrupted by two world wars and the Cold War. (Role of transportation and communication.)
- Three Democratizations: technology, finance, and information. These used to only be in the hands of the few. Globalization is thus about individuals, not just corporations.
- A book full of metaphors, not theories: the electronic herd, the golden straightjacket, DOScapital, et cetera.
- In his new book, The World is Flat, Friedman argues that in the last decade, the world has suddenly become much more globally competitive due to technological factors (the internet, transoceanic fiberoptics, outsourcing, etc.).

---

---

---

---

---

---

---

---