THE ECONOMIC THEORY OF CAPITALISM

A. The Theoretical Efficiency of the Market
B. Market Failure and Government Intervention
C. The Problem of Social Choice
D. Neoclassical Growth Theory and the Hypothesis of Economic Evolution

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, Qs = Qd; if p = 0, Qs >= Qd. Only n-1 prices are necessary, since prices are relative.

"Perfect Market" conditions

- Perfect Competition (PC) – no increasing returns, many buyers and sellers, all are 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 or public goods, no transactions costs, "thick" markets

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
- Efficiency – static and dynamic

The Existence Theorem

- There exists at least one set of n-1 relative prices P that yields competitive general equilibrium (CGE).
- This implicitly requires perfect information and perfect competition.

The Efficiency Theorem

- A conditional proof of the Invisible Hand

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

PI+PC => CGE

CM+CGE => PO (KCC)

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

The Redistribution Theorem

- Real name: The Second Fundamental Theorem

Any distribution of income can result from CGE under an appropriate redistribution of resources, as long as there are no increasing returns.

- A conditional proof of Mill's theory of the separation of production and distribution.
- Under perfect competition, incomes are determined by the resources provided to the market, and the value set 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.

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

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 preventing their solution.

Questions

1. What was Smith's Invisible Hand? What does it suggest for a truly laissez-faire economy?
2. What was Mill's argument about the separation of production and distribution? What policies did he advocate?
3. What is competitive general equilibrium? How does Marshallian partial equilibrium differ from Walrasian general equilibrium?
4. What is Pareto Optimality? How does the Kaldor Compensation Criterion make Pareto Optimality a more useful concept?

More Questions

6. What are the three Arrow-Debreu fundamental theorems of welfare economics, and what do they imply? What preconditions are required?
7. What is the Theorem of the Second Best, and what does it imply for a market economy that fails to meet perfect market conditions?
8. What is the Coase Theorem, and what does it imply for the efficiency of a free market economy?
9. What criticisms did the Austrian school (esp. Hayek) make of the Arrow-Debreu approach to judging the efficiency of capitalism?
10. What important role do market prices play, beyond clearing markets?

Market Failure and Government Intervention

- *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.
- Monopolies, unions, externalities, overuse of natural resources, contagion, thin markets, moral hazard, adverse selection, principal-agent problems, fraud, et cetera, are market failures.
- 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, anticompetition, monopoly regulation, free trade, …
3) No CM – provide or subsidize public goods, tax, subsidize, or regulate spillovers (externalities), 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) Prisoner's dilemma model

Basic model: Nash equilibrium is not the optimum.

Many, many applications.

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

The role of the mob (collusion).

When is prisoner's dilemma in society's interest, and when is it not?

3) Macroeconomic Stability

- Fundamentally, this is an information problem.
- 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.

Macroeconomics after Keynes

- Milton Friedman concluded that Great Depression was caused by monetary negligence of the Federal Reserve.
- 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.
- 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) Equity: social safety net, equal opportunities, redistribution of resources or income

5) Merit Goods and nonmarket preferences – culture, religion, values, whatever: markets induce social change and undermine traditional values.

Market brutality vs. market efficiency (Schumpeter, Michael Moore)

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)

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

- Even if the state is a social compact…
  - 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, cockroaches and legislators.
  - Agencies are hard to manage.
    - Multiple and conflicting goals, risk avoidance, bureaucratic capture, sunset problem, cost disease, et cetera.
  - Residual problems are most difficult to solve.

C. 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.
  - 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:

- Consistent: transitive, independent of irrelevant alternatives.
- Decisive: 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.
- Fair: nondictatorial, 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."

- ✓ No voting rule can be dependably consistent, decisive, and fair. (examples of majority rule, concensus, 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 innovate policies to split governing coalitions and win (Southern strategy, Clinton and the economy).
- Sophisticated parties manipulate the agenda or change the question (Powell amendment, Lincoln Douglas debates).
- Madisonian Liberalism: Voting still puts a check on government policies.

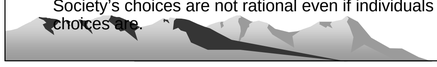
Winston Churchill: "Democracy is the worst system, except for all the others."

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. Preferred policies usually do not serve the social interest. DC 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.

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.
- 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 distributional coalitions. Society's choices are not rational even if individuals choices are.



Questions

1. What is the Prisoner's Dilemma model, and what does it predict? How does it compare to Smith's Invisible Hand? When might the Prisoner's Dilemma work in society's interest, and when might it work against society's interest?
2. What is the theory of public goods, and how does it compare to the Prisoner's Dilemma model?
3. What is market failure? Give examples. What possible interventions could make a market economy perform better?
4. Why does Keynes' General Theory suggest for the appropriate role of government in a capitalist economy? How does the monetarist view contrast with this?
5. What are the other important economic justifications for government intervention in a market economy?

More Questions

6. What are the two major contrasting views of the state? What conditions allowed for the creation of the state? How does Olson explain the changing objectives of the bandit chief, once he becomes stationary?
7. Olson argues that market exchanges are commonplace even in societies without well-defined and enforceable property rights, but without these rights certain types of transactions necessary to economic development cannot occur. Explain.
8. What is public failure? How might government intervention fail to make a market economy work better? What are the major reasons for this?
9. What is Arrow's General Impossibility Theorem? What does it say about social choice and political coalitions? What are its implications for deriving an efficient, stable, fair, and preferred government economic policy?
10. Why might political entrepreneurship in a democracy lead to unstable and even less-preferred policy choices? What does Madisonian Liberalism imply for the long-term?
11. What is Olson's theory of distributional coalitions? How do they differ from encompassing coalitions? Why are distributional coalitions more successful at organizing, and what are the implications of their success?