Scarcity, Efficiency, and Growth
Starring

- The 3 basic questions, and
- The Production Possibilities model
Featuring

- The invisible hand argument for coping with scarcity
- Three basic questions
- Efficiency
- Production possibilities model
- Marginal opportunity cost
Part I

- The invisible hand argument for coping with scarcity
- Three basic questions
- Efficiency
Scarcity and Economic Questions

- Scarcity - relationship between limited resources and unlimited wants. Not all human wants can be satisfied with goods or services.
- Resources - the inputs used to make goods we want. Resources are limited and this leads to scarcity.
Scarcity - relationship between limited resources and unlimited wants. Not all human wants can be satisfied.

L: labor
K: capital
I: land
Resources - The inputs that are used to make things we want

- L: labor - skilled and unskilled, also includes entrepreneurial ability
- K: capital - tools, machines, human capital (education)
- L: land - natural resources, even water
Scarcity implies the necessity of Choice

- We can’t have everything we want thus we must make choices
- Three Basic Questions
  - What (and how much)
  - How
  - For Whom
Basic Economic Questions dealing with Scarcity

- What do we want, and how much of each do we want?
- How shall we get what we want?
- Who shall enjoy what we have?
What do we want, and how much of each do we want?

- I want, we want
  - A chicken in every pot
  - A car in my garage
  - A garage
  - Peace and quiet
  - A lot of fun
  - A good book
  - And so on, and on, and on, and on, and on, and on, and on
How shall we get what we want?

- Who will be the teachers? The nurses and doctors? Who will raise our kids? How will we provide for our old age? For the education of our children?
- What technologies should we use? Do we import, or do we produce ourselves?
- What about the conflict between production techniques and environmental goals?
Who shall enjoy what we have?

- Those who are meritorious? Or, who work hard? Or, who inherit?, Or who are “pure blooded”? Or who are the chosen few? Or who are educated?
- Is there a necessary link between what we get and what we contribute? Should there be such a link?
- Should some things be available to all?
  - Basic medical service, food and shelter
  - Basic education, telephone, postal service
  - Internet access
  - One trip to Disneyland, or a national park per year per family
How should these questions be answered? How are these questions answered?

- Economists have ideas about both.
- **How should they be answered?**
  - Efficiently, say economists
  - Equitably, say others
  - Normative economics
- **How are they answered?**
  - Increasingly through markets, moderated with government regulation
  - A “mixed” economy
  - Positive economics
Efficiency

- The criterion used by economists
- Common sense of the term is “lack of waste” but we use a definition more precise
- Efficiency: the inability to make someone better off without making someone else worse off
- A change is efficient if the gainers could potentially compensate the losers and still come out ahead
Why Efficiency Makes Sense

- The fact of scarcity implies we can’t have everything we want, so what we select should take into account what it costs.
- Efficiency means getting the most value from our limited resources.
- What we want should be accomplished at minimum opportunity cost.
Efficiency and/or Equity

- Efficiency is the preview of economists, equity is for all of us to judge
- Equity does not necessarily mean equality
  - Equality of opportunity is fair (equitable) for most of us
  - Equality of income is probably not fair (inequitable) for most of us
- If a change is efficient and equitable, it probably has already occurred
- Most policy debate is about change that involves a tradeoff between these two objectives
Measurement of Efficient Changes

- Review of definition: A change is efficient if the gainers can compensate the losers and have something left
- Gains are measured by the maximum persons who gain are willing to pay (WTP) for their gain
- Losses are measured by the minimum people who lose are willing to accept (WTA) in compensation for their loss
- An efficient change requires $\Sigma WTP > \Sigma WTA$
- Notice an efficient change doesn’t require losers be compensated, just that they potentially could be compensated
How do we get what we want Efficiently?

- Cooperation is more efficient that self-sufficiency, so how do we insure cooperation?
- Cooperation and the nature of man
  - Man as a benevolent actor
  - Man as a self-interested actor
  - The economist view is that man is motivated primarily by self-interest
Self Interest and Efficiency

- Thomas Hobbs (1588-1679) *leviathan*, 1651

  - “No arts, no letters, no society, and which is worst of all, continual fear and danger of violent death, and the life of man solitary, poor, nasty, brutish, and short.”

  - Advocated the submission to an absolute monarch to avoid the inevitable conflict and chaos resulting from the uncontrolled pursuit of self-interest
Self Interest and Efficiency

- Adam Smith (1723-90) *Wealth of Nations*, 1776
  - The invisible hand argument
  - Policy of *laissez-faire* French "allow to act" commonly taken to mean minimum government
The Invisible Hand Argument

- A wonderful thing, if true
- By allowing each person to pursue their own interest, the general interest will be promoted
- Smith saw self-interest leading to a desirable outcome--the wealth of the nation
- Hobbs saw self-interest leading to a life that was nasty, brutish, and short
Basic tenets of the Smith argument

- The principle human motive is self-interest
- The invisible hand of competition automatically transforms the self-interest of many into the common good
- Therefore, the best government policy for the growth of a nation’s wealth is that policy which governs least (*laissez faire*)
Criticisms of Smith’s Syllogism

- Without government oversight, markets tend to be less competitive and monopoly power replaces competition.
- Even with competition, markets fail when:
  - There are significant external effects.
  - Things we want do not have characteristics of rivalry and excludability.
  - Significant information externalities exist.
- *Laissez faire* produces an intolerable degree of inequality.
Competition vs. Monopoly Power

- We will look at the inefficiencies of monopoly power in chapters 9 and 10.
- Essentially the argument is that monopoly power skews the gains from trade to the advantage of the party with the power. Their gain is less than the loss to the other party; thus monopoly power is inefficient.
Market failures with competition: external effects (Ch. 8)

- Society gains when trade takes place due to the self interest of the buyer and seller. Buyer gains, seller gains, therefore society gains.
- But some trade have effects on others not taken into account by the self interest of the buyer and seller.
- Thus competitive markets may not generate the efficient level of trade.
Market failures with competition: goods with nonrivalry and non-excludability characteristics (Ch. 8)

- Some things we want are nonrival--they may be enjoyed by more than the buyer without cost to the buyer, e.g., Clean air.
- In such cases, who wants to be the buyer--let Bill buy, and I’ll enjoy.
- Some things we want are nonexcludable--people can not easily be denied access, e.g., Salmon.
- In such cases, there tends to be over use--I better get mine before Betty gets hers.
Market failures with competition: information asymmetry (Ch. 8)

- Smith’s argument supposes pursuit of self-interest is efficient because buyer and seller are equally informed.
- When one side or the other knows more about the trade there is information asymmetry that may lead to inefficiency.
- Government has a role in providing sufficient information so self-interest action is informed self interest.
The End

Continue to Part 2