BCA 1/9

What is benefit-cost?
- Identify all costs & benefits
- measure them
- Calculate NET benefit
- Select policy with highest net benefit

Objections
- Can't be measured
  - Environment
  - Survival of species
  - Human life
    - Brief discussion of difference between legal and BCA approach: legal values people based only on wages, which is an undervaluation for reasons we'll discuss later.

    - Why do we place values on these things?
      - No alternative. Choices involving these issues must be made. Choices: (1) not measure and ignore the issue, making decisions based on what you can count. Problem: would lead to some programs that have high negatives in these areas.
      (2) value these things above anything else in an analysis. Problem: a small chance of loss of life could scuttle highly valuable projects; you could never make a decision. Worst example: acting loses x lives, not acting loses y lives. Have to value something there.

    - How do we value the unquantifiable?
      - Look for ways people have expressed valuations and preferences. Usually involves looking at markets (either directly or through allied markets--my note).

  - Distribution/Equity issues
    - Costs and benefits are generally borne by different people/entities. When you do the normal BCA calculation, you lump all these together without regard for who is paying and who is gaining. There is nothing that says this is the correct thing to do, however; who wins and who loses and by how much is a major issue and should always be addressed when doing BCA. Ethical and political considerations are more easily seen/addressed by decision makers this way.

    - How do we deal with this problem?
      - Approach 1: identify all winners and losers in your tally sheet and break out their losses and gains.
      Approach 2: Weight the benefits and losses of different groups unequally if that seems appropriate. Straight addition is using an implicit weight of 1 for everyone, which may not be appropriate.

Don't expect too much from BCA. It's not a panacea; it doesn't address everything and won't prevent some unforeseen outcomes. The answers you get are not the final word.

Use BCA as a tool for decisionmaking, which means you may decide for various non-BCA reasons to do something other than what BCA will tell you to do. Looking for affirmation that we're working in the right direction, and that's all we can expect.

Principle of Optimization

Let MB = marginal benefit; let MC = marginal cost

if you can find out what these numbers are, follow these rules of behavior:

If MB > MC, do more of the activity

If MB < MC, do less of the activity if you can.

Following these rules consistently, you'll approach the optimal:

If MB = MC, don't change behavior.

If we assume that econ actors are optimizing, we can make reasonable conclusions about what we should do; if we know MC, we can discover MB and vice versa.

By thinking that we know how people will behave, we can advise governments.

Government intervention

3 types

allocative: interventions to influence who does what with what resources. Much of this is determined by market forces.

distribution: not of goods to people, but of wealth and well-being across different groups in society.

stabilization: (more macroecon policies, so this is deemphasized in the course...) when markets don't work, fixing those markets is sometimes called stabilization policy (i.e. unemployment in labor markets). Changes from one state of the world to another involves costs; government intervenes to smooth cyclical changes for example.

What happens when government doesn't intervene?

Each of the 3 types above has a problem associated with it.

allocative: too much or too little of certain activities occurs, i.e. smoking or investment.

distribution: unequal distribution of goods and wealth. (question: what does unequal mean? May mean different things to different people)

stabilization: Markets continue to malfunction, creating disruption and social costs.

These are difficult to design and apply solutions for because intervention alters conditions, sometimes in unpredictable ways, particularly in dynamic situations.

One solution: have the government do everything, i.e. have a centralized economy a la the defunct Soviet Union. Very difficult, and experience shows that in most cases this approach doesn't work very well (except for income distribution) because of the complexity of the problems.

Another solution: allow market forces to make the decisions. Market economies are particularly good at allocating resources to the places where they can be used most effectively. On the other hand, distribution of income is not a strength of the market; in fact, it doesn't address this issue at all. Addressing this problem is the primary role of the government. Stabilization falls somewhere in between.

What assumptions are required for a market economy to efficiently allocate resources (efficient means can't change without making someone worse off)?

Perfect competition

Large numbers of firms in each industry, so no individual firm is large enough to affect prices.

Large number of demanders/consumers, so no individual can affect prices.

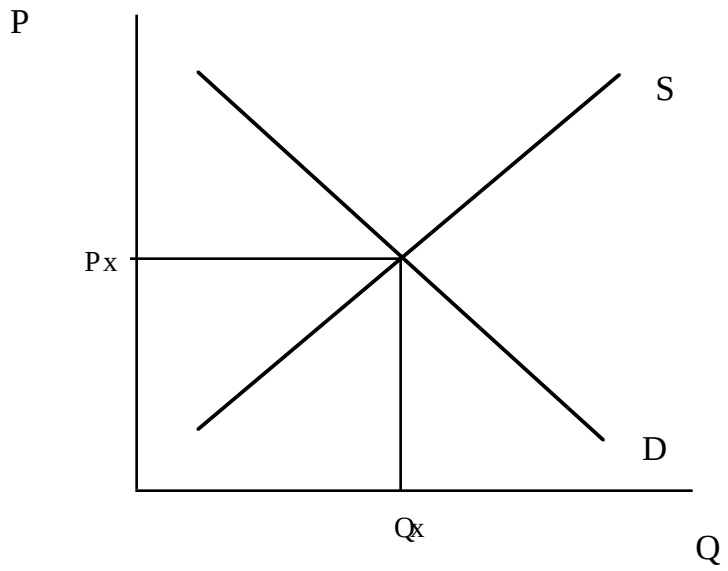
Perfect information (my note)

Perfect mobility (freedom to enter and leave the market) (my note)

Market equilibrium: a single price at which S = D.

Absence of externalities, both positive and negative

What you do doesn't have positive or negative impacts on other people not involved in the transaction (direct spillovers), including changes in prices (example: natural monopoly).



Where does supply curve come from? MC of the firm, which increases production whenever MB of production > MC of production.

Where does demand curve come from? MB of consumption. Consumers increase consumption whenever MB of consumption > MC of consumption. Also known as willingness-to-pay, this is a measure of the value of these goods to the respective parties, so

S = MC and D = MU (marginal utility).