## PLS 505 Applied Policy Analysis and Cost-Benefit Analysis Lecture Notes: Evaluative Criteria Mark T. Imperial, Ph.D.

### Distributional & Other Goods – Chapter 7 of Weimer and Vining (1999)

- Chapter discusses some of the more common rationales for public policies based on values other than efficiency
- Social welfare function: it aggregates the utilities of the individual members of society into an index of social utility
  - It provides an alternative approach to defining economic efficiency and aggregate welfare
  - Rather than defining efficiency as the inability to make someone better off without
    making someone else worse off, efficiency is defined as the allocation of goods that
    maximizes the social welfare function (the "greatest good principle")
  - Different social welfare functions
    - Existence of a universally accepted social welfare function would greatly reduce the complexity of the tasks facing a policy analyst, however, there are problems
      - Social welfare functions assume that utilities can be directly observed, but it is a subjective concept
        - > Rely on no envy to define equity no one would prefer anyone else's allocation to their own
      - It must somehow be specified and absent unanimity among members of society, no voting procedure can guarantee stable choice
        - Rather than being the objective starting point for an analysis, it is more likely to be the product of the value judgments made during the analysis
      - Even if the social welfare function were validly specified, limitations in information and cognition would hinder its practical use
      - People tend to make choices based on the immediate consequences rather than including those in the future
    - Rawlsian maximizes the utility received by the person deriving the lowest utility
      - "maximin" maximizing the minimum utility realized by everyone
      - Assumes that most would blindly chose this option if you didn't know where you would end up
      - Criticism is that it proposes extreme redistribution that reduces incentives to create wealth and that people in the original position are not as risk adverse as is assumed
    - Utilitarianism is a consequentialist philosophy in that actions are evaluated in terms of the preferences of the individuals for various consequences, which in turn can be aggregated
      - Greatest good utilities are added up for everyone
      - Criticism is that it offers weak protection for individual rights since it does not guarantee minimal allocations to individuals
    - Multiplicative is proportional to the product of the utilities of the three persons
  - Measuring changes in social welfare

- Gross national product (GNP): the market value of the output of final goods and services produced by the nation's economy – only a rough approximation of social welfare since items not traded in markets is not valued
- Net national produce (NNP): adjusting the GNP for depreciation and measuring in base year dollars for multi-year comparisons
- Consumer price index (CPI) is an index of how much it costs in current dollars to buy a fixed basket of market goods relative to costs in the same year. Problem is that it tends to systematically overestimate inflation and suggests that government transfer programs with automatic cost of living adjustments are actually growing in terms of real value
- Trade deficit/surplus look at the balance of trade as a sign of strength or weakness in the economy
- Noneconomic indicators include:
  - Infant mortality rates, health care, educational achievement, crime rates, environmental indicators, etc.
- Some cautions in examining distributional consequences
  - Not all wealth is fully reflected in measured income (See table 7.2)
  - Government tax and transfer programs alter the amount of disposable income that people have available to purchase private goods (See table 7.2). as a result, means testing can produce situations in which those with pre-transfer incomes too large to qualify are worse off than those who do qualify
  - Individuals usually consume as members of a household splitting into two households because of divorce would change income by half even though per capita income is unchanged
  - Be careful when using means and medians
    - Median remains unchanged if everyone in the bottom half has their income reduced
  - Care is needed when drawing inferences from intergroup comparisons. There maybe other factors that are more dominant
- Institutional arrangements
  - Institutions: the relatively stable sets of formal and informal rules that govern relationships among members of society
    - Shifts the focus from the valuation of particular allocations of goods to choosing the social, economic, and political institutions from which the distribution of goods emerges
    - Constitutional design perspective focuses on choosing the fundamental procedural rules governing political decision making
      - Constitutions, formal and informal, define the rights and duties of those that reside in their boundaries and the provisions that officials must follow in the creation and enforcement of laws
      - Constitutions derive their legitimacy from the perception that their content provides order in a reasonable and fair way, the way they were formed, and the extent to which they enjoy the consent of those governed, and the ease with which people can chose alternative policies

- Property rights perspective considers the implications of the rules governing ownership and economic activity
- Others examine the significance of social values, norms, habits, conventions, and other informal forces that influence interaction among members of society
- Act utilitariansim: the rightness of an act depends on the utility that it produces
- Rule-utilitarianism: the rightness of an act depends on its adherence to general rules or principles that advance society
- Institutional utilitarianism encourages consideration of a variety of values that contribute indirectly to social utility through more effective political, social, and economic institutions
  - EX: policies that improve the stability of families could be justified on these grounds

# Evaluative criteria other than efficiency – Chapter 7 of Weimer and Vining (1999) & Chapter 5 in Patton and Sawicki (1993)

- Strong arguments can be made for always including efficiency as a substantive value in policy analysis. However, there are values other than *Pareto efficiency*
- Criteria are what we use to guide decision making and compare alternatives
  - Goals: formally and broadly worded statements about what we desire
  - Objectives: more focused and concretely worded statements about end states, usually with a time dimension and a client population specified
  - Criteria: specific statements about dimensions of the objectives that will be used to evaluate alternative policies and programs
  - Measures: tangible, if not quantifiable operational definitions of the evaluative criteria. Each criterion should have multiple measures associated with it.
- Process of establishing criteria
  - Define and establish acceptable and useful criteria. The role of the analyst includes helping the decisionmaker clarify what is sought and define objectives so that alternatives can be designed
    - In practice, decisionmakers may not want to establish clear criteria so they establish purposely-vague criteria.
    - Analysts may also be frustrated when politicians are unwilling to discard multiple, conflicting objectives
  - Defining criteria is a learn by doing exercise. By interacting with clients, and working through the analysis, new criteria are discovered as old criteria are examined

### Costs & benefits

- Concept of costs and benefits is central to policy analysis
- Opportunity cost: the resources diverted from other uses to make a given policy or program possible. In other words, the difference between the value of goods and services in a proposed project and their value if they were used in some alternative way. They include monetarizable and nonmonetarizable and tangible and intangible costs
- Intangible costs or benefits: those that cannot be measured in recognized units (pain and suffering, loss of confidence)

- Tangible costs and benefits: those that can be measured in some type of recognizable unit – they can be counted
- Monetarizable costs and benefits: they can be counted in monetary dollar terms since their value can be judged in the marketplace
- *Direct costs*: one time fixed costs, borrowing costs, operating and maintenance costs
- Indirect costs: costs connected to the impact of a proposal (e.g., building a new parking garage increases traffic)
  - In practice, it is not always easy to distinguish between direct and indirect costs.
     A key is what was the legislative intent of the policy or program
- Shadow prices: a method of establishing costs/benefits when market prices are unavailable or distorted. You can establish the price by looking at another context that is viewed as competitive.
- Standing refers to who is to be considered when costs and benefits are computed. In
  other words, who has a right to be included in the set of individuals or groups whose
  changes in utility or welfare are counted.
  - Determining boundaries of a cost-benefit analysis often influences the results
  - It is really a contextual decision and when there is doubt, you should do the analysis in a variety of ways with different definitions on standing
- Marginal analysis
  - Fixed costs: do not vary with the scale of the public action, at least in the short run (capital costs like purchasing a new garbage truck)
  - Variable costs: vary with the level of output (to collect more solid waste requires more labor and possibly new trucks and other equipment)
  - Average costs: simply the total costs divided by the total output (\$350 per ton of garbage collected)
  - Marginal cost: is the cost incurred to produce an additional unit of output (cost of collecting 1,100 tons of garbage compared to 1,099
    - Marginal costs usually decline with additional output, but not always (e.g., at some point you will need to buy a new truck)
    - Rule of marginality states that output should be produced to the point where marginal cost equals marginal revenue
  - Sunk costs: they are costs associated with resources already built or paid for (If you propose expanding a bridge, you don't include the cost of the bridge already built)
  - Law of diminishing or increasing returns: Eventually you will reach a point where each new unit of cost contributes less benefit than the preceding unit (diminishing) or each new unit of cost contributes more benefit than the preceding unit (increasing).
    - These occur in the short run where levels of some inputs are fixed
  - Economies and diseconomies of scale: Larger size causes decreased marginal costs (economies of scale) and larger size causes increasing marginal costs
    - Occur in the long run where levels of all variables can be increased or decreased
- Pitfalls when dealing with costs and benefits

- Ignoring costs all together or counting only a portion of total program costs or benefits
- Ignoring costs and benefits if they fall to people or governments outside the client's concern
- Is a dollar of cost or benefit equal regardless of its origin or impact? In other words, should a dollar of impact on one group be compared equally with a dollar of impact on another group aggregation problem
- Focusing on monetarizable costs and ignoring those that are harder to measure
- Human dignity: Equity of opportunity and floors on consumption
  - A good society must have mechanisms to limit the extent to which one person's choices interfere with the choices of others.
  - In order to participate in markets, one must have something to exchange. Most would consider a Pareto efficient allocation that results in premature deaths of people to be inappropriate
  - One approach is to increase the number of people with some minimum endowment with public policies intended to provide remedial education, job training, physical rehabilitation, preventing discrimination on the basis of factors that are not relevant to job performance, direct provision of money or in-kind services
  - Once everyone reaches some minimum level of consumption, preservation of human dignity does not necessarily call for further redistribution to increase equality
    - Level is not fixed because society's collective assessment of what constitutes dignified survival reflects the aggregate wealth in society
  - There are also situations where people are incapable of rationally exercising choice children and the mentally impaired
  - When redistributing wealth, keep in mind that it is like transferring water with a
    "leaky bucket." If you try to transfer a little you will lose a little but if you try to
    transfer a lot, you will lose a lot.
- Equity: refers to the distribution of goods and services among individual members or subgroups of a society. It involves questions of who benefits and who pays.
  - The basic premise is that people should be treated similarly except when there is good reason that they should be treated with differentiation
  - Legislation and court descriptions delineate some subgroups that should be treated differently
  - Often big tradeoffs between efficiency and programs such that in many cases programs that prove to be efficient prove to be very inequitable
  - Vertical equity: those who are different should be treated differently. Accordingly, those with greater wealth should pay higher taxes so that everyone gives up the same amount of utility.
  - Horizontal equity: those in similar circumstances should be treated alike. The
    principle is very important when analyzing the provision of public goods and
    services
  - Redistributional equity: is concerned with structuring program activities around differential abilities to pay. Important considerations here are the equality of the process as well as the results. It is important to remember that an efficient program is not necessarily a fair program.

- Fiscal equivalence holds that those who benefit from a service should bear the burden
  of financing it. Thus, those who derive greater benefits are expected to pay more
- Transitional equity: issues arise when a new policy, plan, or regulation creates different, perhaps unfair, situations for specific individuals or classes of individuals.
   A common problem when imposing new land use regulations.
- Intergenerational equity: questions arise when proposed policies and programs appear to have long run costs r benefits.
- Fiscal federalism questions: important questions surround the role that local government is expected to play in matters of social equity. If a local government and its population are poor, should they be expected to pay to provide services to the poor?

#### Instrumental Values

Unlike substantive values of efficiency, equity, and human dignity, instrumental
values reflect the fact that public policy directly results from politics rather than
philosophy and the consequences of policy can be better predicted by these and
similar substantive values

### Technical feasibility

- Criteria measure whether policy or program outcomes achieve their purpose.
   They address the basic question of whether the alternative will work in practice.
- Effectiveness focuses on whether the proposed policy or program will have or has had its intended effect.
  - Most direct method of estimating is looking at how the policy or program has functioned elsewhere. Key is to be sure that the context is similar to the one where it will be implemented
- Adequacy measures how far toward a solution we can proceed with the resources available. Even an effective program may fall short of its objectives or solve only part of a larger problem

# - Economic and financial possibility

- Measure first what the programs cost and what they produce in terms of benefits.
   Costs and benefits can be direct/indirect, tangible/intangible, short/long term,
   quantifiable/nonquantifiable
- Analysts and decisionmakers prefer "hard" analysis and information that can be communicated in quantitative terms
- If all costs and benefits are monetarizable then alternatives can be compared in terms of the economic feasibility (e.g., comparing rates of return) or the ratio of benefits to costs can be compared.
- Effectiveness is measured in dichotomous terms. A program is effective or it isn't. Accordingly, you may search for the cheapest effective alternative but that is not necessarily the most efficient alternative.
  - Cost-effectiveness is appropriate when the goal is to accomplish some task at minimum cost. It seeks to identify alternatives that achieve the objectives but minimizes cost. Any additional benefits beyond those required to accomplish the task are not relevant. Only needs to monetarize costs not benefits

- Efficiency is measured in economic terms and focuses on ensuring that the benefits to be gained in the use of resources (costs) are maximized. For example, dollars cost/unit of output.
  - Cost/benefit analysis is a common tool for measuring efficiency.
- Profitability is the difference between monetarized revenues and monetarized costs to government.
- Administrative operability
  - Criteria measure how possible it is to actually implement the proposed policy or program within the political, social, and administrative context
    - Is the existing administrative system capable of implementing the proposed policy or program?
    - How much control will the implementor have in terms of how it is implemented?
    - What other individuals, agencies or programs must be relied upon?
    - Are there alternative ways to implement the program that are likely to be more effective?
    - We will cover this criteria in more detail in a later set of readings
  - Authority: does the implementing agency have the legal authority to implement a policy and turn it into a new program
  - Institutional commitment from both above and below is important. What is the disposition of implementers.
  - Capability and organizational support: does the agency posses the resources (staff, expertise, experience, and \$) necessary to implement the policy or program

### Political feasibility/viability

- Measure policy or program outcomes in terms of their impact on relevant power groups such as decisionmakers, legislators, administrators, citizen coalitions, neighborhood groups, unions, and other political alliances. The central question is whether one or more alternatives will be or can be made to be acceptable to relevant groups.
- Public policies cannot contribute to substantive values unless they are adopted and implemented successfully
- Political criteria deal with the beliefs and motivations of actors
- Distributional consequences will also impact political feasibility
  - How is the "pork" distributed"?
  - Policies requiring less direct public expenditure are, all else being equal, tend to get greater political support
  - Expenditure levels often serve as proxies for the level of effort since the substantive effects of policies are often hard to predict or measure
- Acceptability: refers to both the determination of whether a policy is acceptable to
  actors in the political process and to the determination of whether clients and
  other actors are receptive to new policies
- Appropriateness is related to acceptability in that it addresses the issue of whether policy objectives mesh with the values of the community or society
- Responsiveness is related to acceptability and appropriateness and involves the target group's perception of whether the policy or program will meet its needs

- Legal criteria can be considered within the category of political criteria since laws can be made and changed through political action
- Equity can be a political criteria when differential impacts are important to the public or decisionmakers
  - Can examine the distribution of costs and benefits by residential location, income, race/ethnicity, age, sex, family status, home ownership status, and current versus future generations