

Valuation through the Analysis of Referenda & other “Public Decisions”

DRAFT – NOT FOR CITATION

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The “revealed preferences” of values that can be inferred from the analysis of referenda and other public decisions may have promise in avoiding the limitations of conventional revealed preference and stated-preference approaches. However, the valuation inferences from referenda and other public decisions also have limitations, and therefore should be used in conjunction with other approaches rather than as full substitutes. The systematic collection and analysis of environmentally- and conservation-relevant official public decisions can help to validate or bring into question the valuations based on conventional methods. Despite the very thin literature on the topic (Deacon & Shapiro, 1975; Kahn & Matsusaka, 1997), public decisions, if interpreted judiciously, can provide information on both willingness to pay and willingness to accept.

The two most prominent limitations of conventional revealed-preference approaches are 1) not all environmental (or eco-system) attributes can be analyzed in terms of market decisions; and 2) those attributes that can be inferred from market decisions wholly or predominantly reflect private-utility maximizing consumer behavior, and thus do not capture whatever degree of “public-mindedness” that might guide people in choosing which attributes ought to be protected or enhanced. Stated preference approaches have been shown to be highly sensitive to the framing of the questions, reflecting the difficulty of replicating the conditions under which individuals would

express their preferences in true situations of public policy choice. Neither can provide fully reliable valuations that are consistent with how citizens or other stakeholders would prefer the polity to choose among conservation and environmental options. And both may be further limited by the fact that valuation conducted by technical experts may be truncated by the experts' efforts to maintain their professional standing by limiting the environmental benefit estimates to the restricted set of benefits that can be most reliably estimated.

The approach of inferring values from the preferences revealed from the choices that the public makes in actual formal public policy decisions, especially referenda, has two obvious virtues: 1) insofar as "public-regardedness" is relevant, it will be reflected in the choices; 2) the choices are real rather than hypothetical. Both of these qualities ensure intrinsic validity, insofar as the preferences thus revealed literally represent how the public prefers to choose among environmental and conservation options.

This approach of inventorying and analyzing public referenda regarding paying for additional environmental amenities (i.e., a willingness to pay) is based on, or at least implies, certain normative premises that diverge from those of conventional valuation approaches. They are:

1. Policymakers should treat public goods as the citizens would wish them to be treated, not as the citizens' personal (self-regarding) valuations would indicate. This is indeed a classical normative dilemma dating back at least to the debate between "constituency representation" and "trustee" (or Burkean) representation: should government officials represent the preferences or the interests of the citizenry? The normative component of this debate re-emerged in somewhat different form over international policy, via Hans

Morgenthau's position that policymakers ought not to indulge their own morality at the expense of what they conclude are the interests of the citizenry.

2. The values of participating in a public act (e.g., the potential gratifications of being part of the support for or opposition to a proposal) are relevant.
3. The intensity of preference is a legitimate criterion for giving standing to those who vote in the referendum and disregarding the non-voters.
4. As with voting in general, the median rather than the mean (or arithmetically averaged) value is the important one. That is, the "public's choice" is the proposal that receives a majority of support, not the choice that has the highest value across the public's preferences.

The ideal referendum situation would involve a very close outcome (it matters little whether the referendum is approved or voted down) on a simple, one-dimensional issue of whether to pay for an environmental improvement with clearly understood benefits and clearly understood costs per household. The closeness of the outcome indicates that the median voter believes that the benefits of the proposal are very close to being equal to the costs.

If the referendum outcome passes easily, we would know at least that that the majority of those who care enough to register their preference value the benefits more than the costs; if it is soundly defeated, then we know that the majority do not value the benefits as much—we can establish floors and ceilings even if the vote is not close.

However, there are problems of three sorts, each with an implication for how to proceed:

1. If the referendum proposal has multiple components, it will not be clear as to how much voters value any particular component. If, for example, we are interested in determining the value of park space, it will be difficult to discern if the referendum also includes environmental education activities. Knowing the valuation of a package of this sort will do little good for benefits transfer. *Therefore strong preference should be given to cataloguing referenda that are viewed by voters as having essentially a single or highly dominant benefit.*

2. If the mode of financing the costs is controversial, it will be difficult to interpret the median vote (in the case of a close outcome) or the majority (in the case of a more lopsided outcome) as an indication of the perceived balance of the benefits and costs, because opposition may be based on distaste for the financing. For example, some voters may object to bond financing because they do not want to encumber future generations, even if they favor the proposal in terms of the benefits at the given cost. Other factors independent of the benefits and costs per se may also confound the analysis, such as the political considerations of allowing those viewed as backing the initiative to gain a political victory (does an initiative advocated by Arnold Schwarzenegger have a better or worse chance of success?). *Therefore strong preference should be given to cataloguing referenda that are not complicated, in the minds of voters, by controversies over the mode of financing or other issues apart from the magnitude of the economic costs.*

3. The costs and asserted benefits of the referendum may not correspond to the perceptions of the voters. This may occur for two reasons. First, voters may not have an accurate sense of the scope of benefits and the true costs. In other words, they may be approving (or disapproving) a perceived price of enhancing the environment that does not

correspond with what the analyst determines the price to be. Referendum campaigns may deliberately distort the stakes. Second, in some cases the voters may (correctly or incorrectly) doubt the claims of effectiveness. Here we are not referring to the benefits that directly flow from the approval of the referendum (e.g., the value *per se* of putting X acres of marshland into a conservancy status), but rather to the benefits that referendum advocates claim will result from the enactment (e.g., that the marshland preserve will preserve the bird species that nest there, or that a higher gasoline tax will actually improve air quality to a specified degree). In such cases, the expected benefits differ from those “promised” by the claims of the referendum advocates. *Therefore the analysis must be accompanied by a survey of what voters believe the benefits to be, taking into account their expectations of effectiveness; and what they believe the costs to be.* This approach turns the usual validation exercise for contingent valuation estimates on its head. Several studies try to validate (or determine the biases of) contingent valuation estimates by comparing them with referendum outcomes (e.g., Vossler & Kerkvliet, 2003). However, the thrust of using the referendum results to infer value requires using surveys of voters as to what they perceive are the costs and benefits, in order to determine the median, floors and ceilings accurately.

Another class of “public decisions” consists of choices to accept a polluting operation into a community, which, if the property rights are clearly with the community, would require some agreed-upon payment from the potential polluter to the community. Insofar as there is an explicit community consideration as to the costs of the pollution, and a public decision on whether to accept the payment offered by the potential polluter, the outcome can provide the basis for some inferences regarding willingness to accept.

Assume, again, that there is a close community vote on whether to accept the offer. This would indicate that the offer is “priced right” to appeal to the median voter. A somewhat less straightforward situation pertains if the vote is not close, or if community leaders make a decision on behalf of the community without an explicit vote. Here again extraneous factors may play a role in decisions whether to support the entry or not, and the analysis would have to be certain that the costs and benefits perceived by community members and/or leaders are accurately gauged.

#### References

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