Contingent Valuation

Description

Contingent Valuation is used to establish the value of some project or asset by the use of survey data, and is used extensively when 'market' values are not available, that is as a means of valuing 'goods' that are not traded in the market place. In lieu of any better approach, it has become the preferred method for non-market valuation. The values obtained are often used as inputs to cost benefit analysis.

Contingent Valuation uses survey techniques to ask people about the values they would place on non-market commodities if markets did exist or other means of payment such as taxes were in effect. People are asked the values they would place on a resource, contingent on the creation of a market or other means of payment. Typically people are asked what they would be willing-to-pay (WTP) or willing-to-accept (WTA) for specific changes in the quality or quantity of the goods being measured. The two measures are sometimes used to put boundaries on the value (since WTA is likely to be higher than WTP).

Contingent valuation is used when there is no link to actual market valuation while other non-market valuation methods (such as the travel cost method) are used when it is possible to establish a link to a market. It is the only method that has been demonstrated to effectively address existence values, or the value that people place on simply knowing that something exists (e.g. black stilt or kakapo).

There are five main approaches to asking questions - bidding games, open-ended questions, payment card formats, dichotomous choice questions, and contingent ranking techniques (and many variations on each of these). In the most commonly used approach respondents are presented with survey material in three parts.

1. A detailed description of what it is that is being valued (the good or service) and the hypothetical circumstance under which it is made available to the respondent. The scenario covers specific goods to be valued, baseline level of provision, structure under which services are to be provided and payment method.
2. Questions to elicit the respondent's value for the good or service. WTP or WTA depending on the property rights at issue (sometimes both so as to gauge bounds).
3. Questions about the respondent's characteristics and preferences relevant to the goods being valued and their use. This demographic information has been used to relate WTP with demographic variables such as income.

The contingent valuation method is associated with 'expressed' or 'stated' preferences. The method of expressed preferences involves questioning individuals directly. The information obtained is an individual estimate and requires aggregation in order to obtain societal estimates.

How and when the tool is used

Contingent Valuation methods have been used in New Zealand to value resources such as

- Recreational areas
- Specific ecosystems
- Forests
- Rivers
- Roading
- Weed and pests (changes caused by)
- Tourist experiences such as 'yellow eyed penguin'

Overseas Contingent Valuation has been used to estimate values for air and water quality changes, wildlife, fishing opportunities, scenic beauty, mosquito control programmes, fumes etc.

Application

Contingent Valuation can be used in a wide range of different contexts. The approach is useful for estimating values, but expensive to apply. The values obtained are usually used within cost-benefit analyses.

Some of the problems that have been identified (in New Zealand practice) include

- Small sample sizes and simplified data collection jeopardising the quality of the results
- No reporting of confidence intervals
- Invalid comparisons (between small and large areas etc)
- Inadequate sensitivity analysis
- Poor response rates
- Naïve statistical analyses

Our evaluation

Contingent valuation, is often used because it is considered to be easy to apply. It can be applied at a variety of technical levels and levels of complexity. However, in practice it is limited by the research's ability to frame questions that are understandable (and unbiased), and the respondent's ability to value the good or service. It is difficult to do properly, and difficulty to get a credible payment vehicle.

There are problems getting people to accept the results of Contingent Valuation studies, particularly because of the difficulties of validating the results. There are ways of doing this using other approaches such as revealed preferences, but they are also difficult and expensive to use, and not often used.

Contingent valuation is probably best used to give a 'ball park' estimate or to bound values for non-market goods that cannot be valued in other ways.