

This text does not represent the consensus views of the SAB Committee on Valuing the Protection of Ecological Systems and Services and has not been approved by the chartered SAB. The text was provided by individual committee members and is offered to extend and elaborate the very brief descriptions provided in chapter 4 of the SAB Report, *Valuing the Protection of Ecological Systems and Service* and to encourage further deliberation within EPA and the broader scientific community about how to meet the need for an integrated and expanded approach for valuing the protection of ecological systems and services.

Combining Revealed and Stated Preference Methods

It is possible to combine revealed and stated preference methods to estimate what both types of choices imply for characterizing an individual's willingness to pay for changes in environmental services. Cameron (1992) was the first to propose this idea for environmental applications. To be informative, this strategy must be based on an analysis of the revealed and stated behaviors to establish that the empirical models used to describe these outcomes share at least one parameter. That is, they must each be capable of identifying at least one common parameter. Ideally there would be more parameters shared between the models. Most applications collect the two types of data (i.e., revealed and stated preference) from the same respondents. This requirement is not essential. It would be possible in principle to combine samples with different respondents providing the revealed and stated components of the analysis. A key issue in applying these methods to the task of valuing ecosystem services is the need to have measures for the quality and amount of ecosystem services that are compatible with models and data typically available for revealed and stated preference models.

See Adamowicz, et al. (1994), Earnhart (2001, 2002), and McConnell, et al. (1999) for more recent applications.

Key References

- Adamowicz, W., J. Louviere, and M. Williams. 1994. Combining Revealed and Stated Preference Methods for Valuing Environmental Amenities. *Journal of Environmental Economics and Management* 26(3):271-292.
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- Earnhart, Dietrich. 2001. Combining Revealed and Stated Preference Methods to Value Environmental Amenities at Residential Locations. *Land Economics* 77(1):12-29.
- Earnhart, Dietrich. 2002. Combining Revealed and Stated Data to Examine Housing Decisions Using Discrete Choice Analysis. *Journal of Urban Economics* 51(1):143-169.
- McConnell, Kenneth E., Quinn Weninger, and Ivar E. Strand. 1999. Joint Estimation of Contingent Valuation and Truncated Recreational Demands. In *Valuing Recreation and*

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the Environment: Revealed Preference Methods in Theory and Practice, edited by Joseph A. Herriges and Catherine L. Kling. Cheltenham, UK: Edward Elgar.