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TH Stevens

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**The Contingent Valuation of National Parks:
Assessing the Warmglow Propensity Factor**

Paulo A.L.D. Nunes, Edward Elgar, 2002, ISBN:
1840649453, 288 pp.

This book is a comprehensive yet concise report of the design and implementation of contingent valuation (CV). It is accessible to CV practitioners as well as to those with little CV background or experience. Although the central focus is to examine the relationship between embedding and the so-called “warmglow” component of contingent willingness to pay estimates, much more is actually accomplished.

The preface should definitely not be skipped since it provides an excellent overview and summary of the entire book. Chapter 1 presents an overview of the concept of total economic value including both existence and use values. Unfortunately, existence value is not defined or discussed in much detail. On the other hand, a brief summary of alternative valuation techniques and the relationship between neoclassical economic theory and CV is presented. This theory section is very brief, but adequate. A short history of CV, which is both interesting and useful, is also contained in this chapter.

Chapter 2 focuses on the validity of CV value estimates. Although hypothetical bias, strategic behavior and information effects are examined, attention is devoted to embedding. This chapter also provides a concise guide for the development of CV surveys. The review of alternative elicitation formats is particularly useful. Both seasoned users and those not very familiar with CV are well served here. References have been carefully selected, key aspects of the debate about hypothetical bias and embedding are discussed, and consequently this chapter presents an “accurate” and unbiased view of the state of the art. The only major issue not discussed in detail is the well-known WTP/WTA disparity.

Chapter 3, which examines the modeling of consumer preferences, is much more advanced in conceptual and mathematical rigor. Non-specialists might be advised to skim this section while specialists will be interested in the utility formulation wherein consumers are assumed to hold use, non-use and warmglow motivations (where warmglow is generated by the act of giving to a good cause). A

theoretic utility model that captures strategic behavior is also presented.

The remainder of this book focuses on a case study of the benefits of protecting the Alentejo National Park (in the southwest portion of Portugal) from development by the tourism industry. Chapter 4 makes a valuable contribution by describing the survey design process in detail. The process outlined here could well serve as a blueprint for other CV studies. Several interesting and somewhat unique design features are discussed including the use of manipulated photography showing alternative development/preservation scenarios. To test for internal validity, two different payment vehicles were employed: a national tax and voluntary contributions.

The survey structure is described in detail in Chapter 5. A complete copy of the survey (in both English and Portuguese) is presented in an appendix. A total of 28 survey versions were used to test for the effects of information, payment vehicle and level of park protection (embedding). Procedures used to select a sample representative of the Portuguese population, interviewer training and field supervision protocols are described in Chapter 6. Results of the empirical case study are set forth in Chapters 8–11. Since between 39% and 49% of respondents, depending on survey version, would not pay for park protection, the possibility of protest or strategic behavior was investigated. Non-payment response was higher in the voluntary contribution format, so some respondents might have been free riding. Based on results of follow-up questions designed to detect protest behavior, about 22% of those who would not pay were identified as protests. WTP estimates presented in Chapter 9 are shown to be consistent with previous research. However, a sensitivity analysis of these WTP estimates suggests the possibility of embedding associated with warmglow effects. The rest of the analysis focuses on this issue.

First, information about respondent’s motivations were derived from a factor analysis of 26 follow-up questions. Respondent’s motivational structure is characterized with respect to: (a) use motive, (b) non-use motive and (c) warmglow motive. Enough detail is provided to enable the reader to understand what was done and why.

Warmglow motivation is explored further in Chapter 11 (which is a longer version of a paper appearing

in *The Journal of Environmental Economics and Management* (2002). The portion of WTP associated with warmglow ranged from about 72% to 35% and, when warmglow was removed from the WTP estimates, embedding, (violation of the so-called “adding up” property), was no longer observed. However, the author concludes that, although warmglow was responsible for the embedding observed in this study, warmglow is a legitimate component of value and that warmglow values should not be excluded from benefit–cost analysis.

This is likely to be a controversial conclusion because warmglow generally has nothing to do with the specific commodity being valued. Also, as noted by Milgrom (1993) and others, in some cases, inclusion of warmglow leads to double counting. On the other hand, Nunes reminds us that economics has a “long standing tradition that one takes people’s preferences as one finds them”.

Although some will disagree with the conclusions reached in this book, it provides a concise guide to CV analysis and raises the very important issue of whether some values, like warmglow, should be included in benefit–cost analysis. And, it provides a new and provocative explanation.

References

- P. Milgrom, P., 1993. Is sympathy an Economic value? J.A. Hausman, J.A. (Ed.), *Contingent Valuation: a critical Assesment*, Contributions to Economic Analysis. North-Holland, New York.

Thomas H. Stevens
Department Resource Economics,
University of Massachusetts, 226 Draper Hall 01002,
Amherst, MA, USA
E-mail address: tstevens@resecon.umass.edu
Tel.: +1-413-545-5714; fax: +1-413-545-5853