

Choice Modelling Approach: A Review

Jasmeena Bashir¹ and Bisma Raina²,

Email ID: jasmeenbasheer16@gmail.com

Abstract

The main aim of this paper is to review the recent developments in the environmental valuation methods and their methodological issues. Environmental valuation methods can be categorized into revealed-preference methods, stated-preference methods and production-function approaches. Among the set of stated preference methods the Choice Experiments (CE_s) is now widely applied to diverse environmental goods where market failure exists. This method has found its success in resolving some methodological issues of Contingent Valuation Method (CVM). Choice experiment is the method which has greatest number of applications where people choose their most preferred alternative from a series of alternatives by simply ranking and rating scales. The study concludes that despite many limitations or methodological issues arising due to hypothetical nature of stated preference surveys, choice experiment method can be successfully applied to a range of non-marketed goods with certainty to measure consumer preferences.

References

- Adamowicz, W., Louviere, J., & Swait, J. (1998). Introduction to Attribute-Based Stated Choice Methods-Final Report. *National Oceanic and Atmospheric Administration*.
- Adamowicz, Wiktor, Louviere, J., & Swait, J. (1998). Introduction to attribute-based stated choice methods. *NOAA-National Oceanic Atmospheric Administration, Washington, USA*.
- Bateman, I. J., Carson, R. T., Day, B., Hanemann, W. M., Hanley, N., Hett, T., Jones-Lee, M., Loomes, G., Mourato, S., & Ozdemiroglu, E. (2003). *Guidelines for the use of stated preference techniques for the valuation of preferences for non-market goods*. Edward Elgar, Cheltenham.
- Bateman, Ian J., Carson, R. T., Day, B., Hanemann, M., Hanley, N., Hett, T., Jones-Lee, M., Loomes, G., Mourato, S., & Pearce, D. W. (2002). Economic valuation with stated preference techniques: A manual. *Economic Valuation with Stated Preference*

- Birol, E., & Koundouri, P. (2008). *Choice experiments informing environmental policy: A European perspective*. Edward Elgar Publishing.
- Blamey, R. K., Bennett, J. W., Louviere, J. J., Morrison, M. D., & Rolfe, J. C. (2002). Attribute causality in environmental choice modelling. *Environmental and Resource Economics*, 23(2), 167–186.
- Flachaire, E., & Hollard, G. (2007). Starting point bias and respondent uncertainty in dichotomous choice contingent valuation surveys. *Resource and Energy Economics*, 29(3), 183–194.
- Green, P. E. (1995). The Role and Limitations of Conjoint Analysis in the Preference Modeling of Constructed Markets. *The Wharton School, University of Pennsylvania*.
- Hanley, N., Wright, R. E., & Adamowicz, V. (1998). Using choice experiments to value the environment. *Environmental and Resource Economics*, 11(3–4), 413–428.
- Hensher, D. A. (1994). Stated preference analysis of travel choices: The state of practice. *Transportation*, 21(2), 107–133.
- Hoyos, D. (2010). The state of the art of environmental valuation with discrete choice experiments. *Ecological Economics*, 69(8), 1595–1603.
- Katuwal, H. (2012). *Demand for Water Quality: Empirical evidence from a knowledge, attitude, behavior, and choice experiment survey about the Bagmati River in Kathmandu, Nepal*.
- Ladenburg, J., & Olsen, S. B. (2006). *Starting point anchoring effects in choice experiments*. Fødevareøkonomisk Institut.
- Louviere, J. J. (2001). Choice experiments: An overview of concepts and issues. *The Choice Modelling Approach to Environmental Valuation*, 13–36.
- Martinsson, P., Carlsson, F., & Alpizar, F. (2001). Using choice experiments for non-market valuation. *Rapport Nr.: Working Papers in Economics, Nr, 52*.