

Economic valuation of cultural heritage sites: A choice modeling approach

Andy S. Choi^{a,*}, Brent W. Ritchie^b, Franco Papandrea^c, Jeff Bennett^a

^a Crawford School of Economics and Government, The Australian National University, ACT 0200, Australia

^b School of Tourism, The University of Queensland, QLD 4072, Australia

^c Communication and Media Policy Institute, Building 1, University of Canberra, ACT 2601, Australia

ARTICLE INFO

Article history:

Received 7 September 2007

Accepted 28 February 2009

JEL classification:

Q51

C51

Keywords:

Choice modeling

Cultural heritage site

Nonmarket valuation

Mixed logit

ABSTRACT

Despite growing attention by researchers and policy makers on the economic value of cultural heritage sites, debate surrounds the use of adequate methods. Although choice modeling techniques have been applied widely in the environmental economics field, their application in tourism and cultural economics has been much more limited. This paper contributes to the knowledge on the economic valuation of cultural heritage sites through a national choice modeling study of Old Parliament House, Australia. The study sought to value marginal changes in several attributes of this site and revealed that only some of them are valued positively: extending the period of temporary exhibitions, hosting various events, and having 'shop and café' and 'fine dining'. Advantages of using a mixed logit model are provided and managerial and policy implications are discussed.

© 2009 Elsevier Ltd. All rights reserved.

1. Introduction

Throughout the past two decades, the estimation of economic values of cultural goods and services has drawn the attention of economists (Kaminski, McLoughlin, & Sodagar, 2007; Navrud & Ready, 2002; Noonan, 2003; Venkatachalam, 2004). As Mazzanti (2002: p. 543) observed '[v]aluation is a central issue for cultural policy given cultural markets concerning heritage do not reflect the value users and society attach to the services provided by institutions.' Cultural goods and services contribute to social welfare and have public good characteristics that constitute legitimate arguments for the public provision of subsidies. However, questions remain regarding the level of the financial support that should be provided for cultural goods such as those supplied by public heritage institutions and cultural heritage sites.

Although there is a growing recognition of the broader economic value of cultural goods by academics, government policy makers and industry, no studies have been undertaken in Australia to estimate their economic value across the whole nation. In part this is due to difficulties in obtaining relevant market data and the

consequential need to use stated preference methodologies, such as the contingent valuation (CVM) and choice modeling (CM). The use of CM to estimate cultural values has so far been limited, though growing with CVM being dominant in the field (Kaminski et al., 2007; Noonan, 2003). Morey and Rossmann (1999) were the first to apply CM to cultural heritage with their research on air pollution policies. Other studies include Maddison and Foster (2003), Mazzanti (2003), Mazzanti (2002), Morey and Rossmann (2003), and Rolfe and Windle (2003).

The aim of this paper is to contribute knowledge on the economic valuation of cultural heritage sites. It reports results of a CM study to estimate the economic values of the diverse attributes of a cultural heritage site, Old Parliament House in Canberra, Australia. It applies the technique to both users and nonusers of the site making the scope of this paper unique.

Estimates of this kind are of value to both policy makers and managers of cultural institutions. To policy makers, the research provides a measure of the extent to which policies supporting cultural heritage sites are consistent with community expectations. To managers of cultural heritage sites, the research provides empirical guidance on the relative value that the wider community places on the services and facilities provided by the sites. As sites are actively reacting to community valuations of the benefits they offer to both visitors and nonvisitors, the research findings can help managers make more informed decisions on programs and activities that better reflect community expectations.

* Corresponding author. Permanent address: 291-18 Yeoungwoon-Dong, Dong-Gu, Daejeon 300-120, South Korea. Tel.: +82 10 4772 9677; fax: +61 2 6125 8448.

E-mail addresses: kecc21@hanmail.net (A.S. Choi), b.ritchie1@uq.edu.au (B.W. Ritchie), franco.papandrea@canberra.edu.au (F. Papandrea), jeff.bennett@anu.edu.au (J. Bennett).

2. The economic valuation agenda

Hansen, Trine, and Wanhill (1998) attribute a growing interest in cultural and heritage economics to two main factors. The first is the increasing interest in the interaction between expanded leisure time and increased demand from visitors to cultural and heritage attractions. The second reason relates to shifts in government policy towards market economics and curtailment of public spending. Cultural activities have public good attributes that contribute to society's well-being. Their characteristics often provide legitimate arguments for public provision of subsidies. However, questions remain over the level of support for public heritage sites and attractions, and decisions made by heritage managers need to consider the economic consequences of their actions, along with the educational, social and environmental impacts.

To date research on the value of cultural and heritage attractions has focused on the educational value of such attractions and heritage sites. A study by Garnett (2002) of over 180 publications on the impact of science centers and museums found that 87% concentrated on personal impacts, while only 9% examined the societal value, and 4% focused on the economic value of the institutions. This is due, in part, to cultural heritage sites having both market and nonmarket goods characteristics that are difficult to value. Valuation of nonmarket goods (such as heritage sites) has received considerable attention from environmental economics' practitioners, and there is a large amount of related literature (see Mitchell and Carson (1989) and Herath and Kennedy (2004) for a summary). However, few studies have been undertaken to place an economic value on cultural heritage sites despite the debate over their value to society and the growth of cultural economics as a field of research and scholarship.

The application of economic techniques and models to value heritage sites can add to the understanding of the broader economic value of these assets to society. It is of interest because there are increasing demands on cultural institutions and a move away from a focus on educational/personal values to considerations of their broader economic values. As the government at many levels often contributes substantial funds to these heritage sites (from taxation revenues) there is a need to place an economic or monetary value on these nonmarket goods to assess the efficiency of funding policies. This need for knowledge and the development of suitable techniques to measure economic value could assist the development of better-targeted policies and help secure more effective support for heritage sites.

Typically in valuation studies the interest is in estimating total economic value, which includes not only use values (for example, activities and services), but also intangible nonuse values (for example, educational, bequest, and altruistic values) not normally captured in private market transactions. Total economic value can be estimated using stated preference nonmarket valuation techniques (Bateman et al., 2002; Bennett & Blamey, 2001a; Hensher, Rose, & Greene, 2005; Noonan, 2003), such as CVM and CM, outlined in Fig. 1. Recourse to such methods is necessary because cultural goods have the characteristics of public goods (that is, nonmarketed goods). Revealed preference methods are applicable only when data on market transactions or activities are present, which include a component reflecting the value of a good or service such as the cost of travel incurred in visiting a site (travel cost method), the extra price you need to pay to enjoy the good (hedonic pricing), or the cost you pay to avoid an inconvenience or hazard (averting behavior or market prices).

However, when reliable market data are not available researchers may need to create a hypothetical market to elicit consumer preferences. For example, cultural institutions and

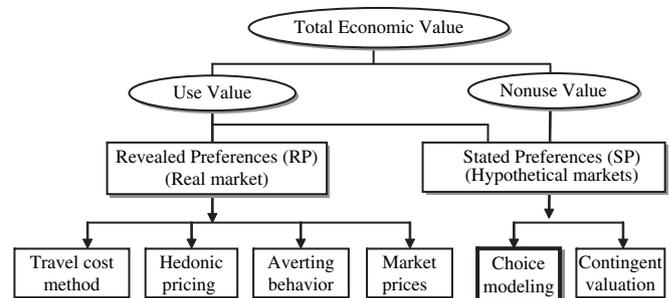


Fig. 1. Economic valuation techniques. **Source:** modified from Fig. 1.4 of Bateman et al. (2002: p. 30).

heritage sites often provide a variety of public contributions such as symbolic cultural items, historical value, social value, aesthetic value, spiritual value, educational value and shared experience (Hansen et al., 1998; Sable & Kling, 2001; Throsby, 2001). These are public goods, and their economic values are not easily determined from transactions in actual markets.

In stated preference methods, respondents are asked to directly state how much they are willing to pay (or accept) for the given good (through CVM) or to choose the preferred option among a given set of choices (through CM).

Because of their capacity to capture both use and nonuse values stated preference techniques were used in this study. CVM as a nonmarket valuation technique has become popular and widely used over the past four decades (Noonan, 2003: p. 160; Venkatachalam, 2004: p. 90). In a CVM survey, respondents are asked to express their willingness to pay (WTP) for a good (or its change). There are several variations that are employed in CVM to elicit WTP information including, dichotomous choice (respondents are asked to say 'yes' or 'no' to a given proposition), 'payment cards' (respondents asked to choose from a list of prices the one that best reflects their WTP for the good), and 'auction bidding' (respondents asked to say 'yes' or 'no' to escalating or descending stated prices). The application of CVM to cultural goods is a relatively recent phenomenon with a limited range of examples available in the published literature (Navrud & Ready, 2002: p. 257; Noonan, 2003: p. 161). Noonan (2003), in a bibliography of studies that have investigated cultural value through CVM, notes 35 studies since 1972 with the majority undertaken on specific cultural or historical sites.

Although CVM applications have not been without controversy, the reliability of the methodology when following a set of recommended good practices was endorsed by a 'blue-ribbon' panel of experts co-chaired by Nobel economics laureates Kenneth Arrow and Robert Solow (Arrow et al., 1993). In common with other stated preference techniques CVM estimates are prone to various types of bias (Bateman et al., 2002: pp. 296–342; Venkatachalam, 2004: pp. 90–117). They include an unreal/hypothetical scenario setting in which respondents may overstate or understate their true preferences (hypothetical or strategic bias); whether a resource or good is presented as a separate unit or as a part of aggregate goods (embedding or scope effect); how the information is given to respondents in surveys and whether alternative choices are provided (information or 'framing' effect); tendency to say 'yes' (yea-saying); whether respondents are asked to pay a high or low amount of payment (starting point bias); and influences from a payment method (payment vehicle bias).

At the same time, problems caused by poor designs and administrations for many cultural valuation studies are widely recognized. Common problems include poorly defined or implausible goods and a low response rate (Bennett & Blamey, 2001b;

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات