

Tourism Discretionary Spending Choice Behaviour

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Abstract

Studies of tourism demand are numerous. But studies of how consumers apportion discretionary resources to tourism and across other competing categories of discretionary expenditure are non-existent. Therefore, how individuals and households make trade-offs between, or assess the respective utilities of, the various categories of discretionary expenditure and allocate discretionary financial resources, appears to be unknown. This study seeks to address this need by examining discretionary expenditure through choice experiments. The data provide insights into how each type of discretionary expenditure is valued and how each type competes for a share of the discretionary expenditure 'pie'. We discuss the results with an emphasis on the implications for tourism marketing.

Keywords: discretionary spending, tourism demand, choice experiments, tourism marketing

Background

Surprisingly few studies have attempted to investigate why and how potential tourists spend money on tourism? Given the limited discretionary expenditure available to consumers a critical unanswered question is "how does tourism compete for a share of a household's discretionary use of financial resources?" That is, individuals and households have the option of allocating discretionary financial resources amongst many uses including (but not limited to): debt reduction, investments, home improvements, home entertainment equipment, other forms of leisure and recreation, charitable donations, personal items (jewelry, clothing, books, etc.), and overseas and domestic tourism.

This paper presents findings of a research investigation aimed at understanding how Australians make choices among discretionary expense allocations, with particular emphasis on the drivers of tourism expenditures. The analysis, therefore, attempts to predict how individuals would prefer to allocate windfall income across the various forms of discretionary spending.

We surveyed a representative sample of Australians. The survey included choice experiments that manipulated various discretionary expenditure options. Hypothetical discretionary spending choices were observed and the results analysed to produce the findings reported below.

Economic Theory

Few studies examine how individuals and families use funds for discretionary expenditures. This is particularly interesting when one considers that in countries like Australia a large

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proportion of available spendable funds would be considered discretionary. Specifically, discretionary expenditure comprises spending outside normal family budgets (this includes housing expenditures (rents/mortgages), grocery/food, utilities and household maintenance, basic clothing, automobile and petrol expenses, etc.). Discretionary expenditures include ancillary spending on housing (e.g., renovations), investment and savings, holidays, spending on luxury items (e.g., flat panel TVs), etc.

Surprisingly, traditional neoclassical economic theory has little to say about discretionary expenditure. Basic economic models of budget allocation and spending typically assume that all products and services compete with all other products and services. This assumption is related to the linear nature of neoclassical economic thinking that follows from utility maximisation models. What matters in economic models of consumers is that the marginal utility derived from a commodity divided by the marginal utility of a dollar of income is equalised across all options available, be they product categories or products. This says nothing about the way in which purchases are made or how the individual prioritises specific types of expenditure (short of a marginal utility ranking).

Marketing scholars normally avoid studying the issue of discretionary expenditure, instead focusing on within category competition (e.g., which brand amongst all coffee brands is being chosen) or competition between related categories (e.g., varieties of fast moving consumer goods). From a marketing perspective, the most relevant theoretical and empirical approach for this study is Hauser and Urban's (1986) "value priority" work. This work is neoclassical in structure, based on utility orderings by individuals, but focuses exclusively on the ordering of expenditure between product categories. The present study complements this earlier work.

Expenditure on Tourism

Many studies have examined tourist expenditures, including modelling the determinants of such expenditure (e.g., Ashworth and Johnson, 1990; Barry and O'Hagan, 1972; Cai, Hong and Morrison, 1995; Fuji, Khaled and Mak, 1985; Mak, Moncur and Yonamine, 1977; Moncur, 1978; O'Hagan and Harrison, 1984). In addition to expenditure studies, there are many analyses of tourism demand employing other demand measures, most notably visitor-nights or visitor numbers. The vast majority of these demand models have tried to identify the exogenous variables affecting tourism demand, specifying a causal model that defines the longitudinal relationship between these variables and tourism demand (as the endogenous variable), and then estimating the parameters of this relationship to identify how variation in tourist demand over time is associated with variation in the explanatory variables over the same time period.

Although an impressive history of tourism demand models has accumulated since the 1960s, this stream of research has largely focused on determinants of tourism demand, while failing to consider how individuals or households make trade-offs in allocating discretionary expenditure across different categories of expenditure that include tourism as an option. We could not find a single study that tried to measure such trade-offs.

This is surprising as large expenditure allocation decisions require broad tradeoffs as multiple and radically different alternatives are evaluated. If the trade-offs are ignored in the models, estimation of the demand model parameters will be biased unless the omitted factors are uncorrelated with the variables included in the models. However, it is possible that, without empirical validation, these included and omitted variables are collinear. Ignoring trade-offs in discretionary spending decisions therefore misses significant factors needed to fully

understand tourism demand, and how individuals and households allocate available funds to spending alternatives.

In summary, this research project investigates an important but neglected area for those interested in the economic health of tourism industries, destinations, and enterprises. Most tourism marketing research and practice implicitly assumes either 1) that competitors within the tourism industry compete for a share of fixed expenditure on tourism, or 2) that they compete for a share of tourism expenditure, which varies only as a function of economic cycles, interest rates, and the like. They ignore the fact that tourism expenditure is just one (varying) share of a larger discretionary expenditure 'pie'.

Research Approach

Research Design

To achieve the aims of this research, we surveyed a sample of Australians to obtain information about discretionary expenditure behaviour. Asking individuals/households about actual discretionary spending is subject to a number of limitations related to recall and reliability of responses. To avoid such problems, we constructed a choice experiment to examine how individuals/households would allocate a foreseen, windfall amount, such as an unexpected tax refund. The advantage of this approach is that such 'stated choices' make it possible to observe the choices respondents make given the characteristics of each option available. Discrete choice modelling (DCM) methods² provide an appropriate tool for analysing stated choice data.

The Survey

The survey introduced the respondents to a hypothetical situation where \$2,000 would become available to the respondent as a one-off tax-free payment. The money could be allocated only to specific discretionary items. The survey presented respondents with nine experimentally designed choice scenarios that varied the availability of a larger set of expenditure options. In each set, respondents had to indicate how the \$2,000 would be allocated to the available expenditure categories, assuming that the categories listed in each set were the only discretionary expenditure options available.

The survey included general socio-demographic questions. A final group of questions covered respondent's holiday trips including frequency of shorter and longer holidays, accommodation typically chosen when holidaying, information typically used to learn about holiday destinations, and types of activities conducted or sought when on holiday. These latter questions provided a battery of items representing activities and holiday motives or benefits.

Survey Sample and Data Collection

We obtained 1,053 completed surveys from a random sample of 2,766 members of an online consumer panel (response rate 38%). The panel comprises over 100,000 members across Australia who gave permission to be contacted for research participation. Participants have an account and receive small payments to participate. They can use their accumulated earnings

² See Crouch and Louviere (2001) for further discussion of DCM and a review of DCM applications in the context of tourism.

for gift vouchers or simply take the amount as cash. The demographic profile of the panel closely mirrors the Australian population on most key social and demographic dimensions.

Based on ABS population data, in terms of gender and geographic distribution by state, the survey respondents are a close representation of the Australian population. The age profiles are also reasonably close as well. In terms of household income, respondents are skewed towards higher incomes, probably mainly reflecting ownership of a computer. Household incomes under AUD\$30,000 per year are under-represented whereas household incomes over AUD\$60,000 per year are over-represented by the survey.

Analysis and Results

As a first approximation we estimated the discretionary allocation process using a multinomial logit (MNL). Each category is represented by a utility function that consists of a single intercept or category constant. The experimental design was constructed to vary the available expenditure categories and allows one to test for violations of the MNL model. If the null hypothesis of no violations is rejected, one can estimate a more general model known as a Mother Logit (ML) Model (McFadden, Tye and Train, 1977). ML allows for the presence or absence of each expenditure option to influence its own choices as well as the choices of all other options. Thus, in addition to the single constants for each category represented by an MNL model, ML includes terms for the presence or absence of the remaining categories in each utility function. In this way, the presence or absence of category (a) can impact the choices of category (b).

The utility of each of the options i in the total choice set of j options is hence specified as:

$$U(O_i) = d_j * O_j + b_1 * Age + b_2 * Age^2 + b_3 * Inc + b_4 * Inc^2 \quad (1)$$

where, d_j is the presence-absence dummy for each of the options O_j (coded -1 for absent and +1 for present) and Age and Inc are the mean-centred age and income variables respectively, including quadratic terms to capture possible non-linear effects.

A maximum likelihood procedure was used to estimate the model. The likelihood ratio test and McFadden's pseudo- R^2 show that the model fit is good. For each alternative, the estimated parameters are the own- and cross-effects of the presence/absence of the options in the choice sets (with the base case being the situation in which all are present in each set) and the age and income effects at the sample means. The expenditure category 'Charity' is the reference case. The results³ revealed that, at the 5% level, an overseas holiday was the only statistically significant substitute for a domestic holiday. Similarly, a domestic holiday was found to be the only significant substitute for an overseas holiday. In both cases the other forms of discretionary expenditure displayed no significant cross-effects. This can be interpreted to mean that the presence or absence of these other discretionary expenditure options does not attract a disproportionate share of overseas or domestic holiday spending.

Estimation of these constants allows us to use the MNL models to calculate aggregate probabilities for each discretionary expenditure option:

$$\Pr(O_i) = \frac{e^{U_i}}{\sum e^{U_j}} \quad (1)$$

where, $\Pr(O_i)$ = probability of choosing discretionary expenditure option i , and

³ The 5-page paper restriction precludes the full set of the Mother Logit results. However, a copy of these may be obtained from the first author.

U_i = utility of option i .

The resulting aggregate probabilities can be interpreted as the share for each of the options at the sample means for age and income, as shown in Table 1. The figures in the table reveal that 49 percent of the expenditure is allocated to ‘reducing household debt’, with another 12 percent being allocated to ‘financial investment’ and 11 percent to ‘home renovations’. In total, 72.6 percent would be used for savings related expenditure. The majority of the remaining 27.4 percent goes to ‘overseas holidays’ (10.4%), followed by ‘domestic holidays’ (9.2%).

Table 1: Share Predictions Using Mother Logit Results

| | Aggregate shares |
|------------------------------|------------------|
| Reducing household debt | 48.6% |
| Financial investment | 11.8% |
| Home renovations | 11.2% |
| Home entertainment equipment | 4.9% |
| Leisure activities | 2.9% |
| Domestic holidays | 9.2% |
| Overseas holidays | 10.4% |
| Charity donations | 1.1% |
| Total | 100.0% |

Conclusion

The largest predicted share of discretionary spending (49%) went to reducing household debt, in particular to credit card and mortgage repayments. This is understandable given that the survey was conducted at a time when interest rates were historically relatively low but economic forecasters were predicting that rates were likely to rise. The next most important items, attracting approximately equal amounts on average, were financial investments, home improvements, overseas holidays, and domestic holidays, each accounting for between about 8–12 percent of discretionary expenditure.

The survey results thus indicate that Australians would spend approximately 8 percent of windfall discretionary resources on domestic tourism and about 11 percent on overseas tourism. The analysis furthermore shows that the option to reduce household debt has a disproportionately greater negative impact on financial investments and home renovations (as measured by the analysis of cross effects) than domestic and overseas tourism spending (and the other expenditure categories). The results also show that international tourism expenditure competes more with domestic tourism expenditure than with other expenditure types. This is not at all surprising but it does highlight the fact that the Australian domestic tourism industry competes globally for a share of discretionary household expenditure. Various tourism marketing campaigns in the past have endeavoured to encourage Australians to holiday within Australia. The recent strengthening of the Australian dollar, however, has decreased the competitiveness of domestic versus international tourism.

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