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Tourism And Discretionary Income Allocation - Heterogeneity Among Households

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Abstract
Tourism expenditures have been much researched in the past: at the aggregate level to evaluate national benefit of the tourism industry and at the disaggregate level to evaluate the attractiveness of tourist market segments. Past studies, however, fail to take into account that tourism expenditures are affected by the plethora of other expenditures households make and that households are heterogeneous in allocating discretionary funds to alternative spending options. The present study fills this gap by investigating heterogeneity in household discretionary expenditures derived from a realistic choice task. In doing so it challenges the implicit paradigm of prior research into tourism expenditures in which the context of the household tradeoff in allocating money is ignored. The results: highlight the importance of studying tourism expenditure in the context of other household expenditure decisions; demonstrate the high level of heterogeneity between individuals with respect to their spending preferences; and illustrate the value of this knowledge for tourism destination management as well as government policy in being able to assess the competition between expenditure categories and identify market segments most suitable for the product category offered.

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TOURISM AND DISCRETIONARY INCOME ALLOCATION
Heterogeneity Among Households

Abstract: Tourism expenditures have been much researched in the past: at the aggregate level to evaluate national benefit of the tourism industry and at the disaggregate level to evaluate the attractiveness of tourist market segments. Past studies, however, fail to take into account that tourism expenditures are affected by the plethora of other expenditures households make and that households are heterogeneous in allocating discretionary funds to alternative spending options. The present study fills this gap by investigating heterogeneity in household discretionary expenditures derived from a realistic choice task. In doing so it challenges the implicit paradigm of prior research into tourism expenditures in which the context of the household tradeoff in allocating money is ignored. The results: highlight the importance of studying tourism expenditure in the context of other household expenditure decisions; demonstrate the high level of heterogeneity between individuals with respect to their spending preferences; and illustrate the value of this knowledge for tourism destination management as well as government policy in being able to assess the competition between expenditure categories and identify market segments most suitable for the product category offered.

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1. INTRODUCTION

One important question is shared by all stakeholders, whether destination marketers, policy makers or tour operators and others working at the coal face, in the tourism industry: What determines tourism spending and how can people be influenced to spend more of their budget on tourism related activities? Consequently, a large number of studies in tourism have investigated the determinants of tourism expenditure (e.g., Cai, 1999; Cai, Hong and Morrison, 1995; Dardis, Derrick, Lehfeld and Wolfe, 1981; Dardis, Soberon-Ferrer and Patro, 1994; Davies and Mangan, 1992; Fish and Waggle, 1996; Hsieh, Lang and O'Leary, 1997; Nicolau and Mas, 2005). A related stream of research has investigated patterns in tourist expenditures and how these expenditures might differ between *a priori* defined segments of tourists (for instance, Hong, Kim and Lee, 1999; Jang, Bai, Hong and O'Leary, 2004; Opperman, 1996).

All the cited studies looked at tourists who had already made a decision to travel; in other words, those who had already made a decision to spend a significant amount of their discretionary income[1] on a vacation rather then spending it on a range of alternative options. Although these studies are valuable, they do not provide insight into how consumers decide between the various expenditure options they face, which includes tourism, but also options such as paying off debt or purchasing a home entertainment system. Consequently, one cannot generalize the findings of these studies to non-traveling populations. For instance, finding that younger travelers spend more on

[1] We use the term discretionary income to refer to an individual's income that is available for spending after all essentials (such as food and accommodation) have been paid for.

vacations may not hold for a general population in which young people may spend most of the money on education. Indeed, policy makers could potentially benefit from knowing how individuals are likely to allocate disposable income, and with which kinds of expenditures tourism competes. At a national level, this knowledge is essential to assess how policy initiatives are likely to impact the distribution of household expenditure across alternative uses. For example, when tourists choose to spend discretionary funds on a vacation, they may at the same time choose not to spend these funds on a new plasma TV, which would imply that a stronger, more attractive tourism industry might have negative effects on retailing, or *vice versa*. At a destination management level, it would be beneficial to know which consumers would consider spending their disposable income on vacations rather than on repaying loans. That is, consumers who would invest their spare money repaying their loan are unlikely to be good target markets for advertising vacations. Hence, knowing how much other discretionary consumption categories compete with vacation spending could provide excellent insights into potential opportunities for cross-industry advertising.

These issues are addressed in a paper by the authors (Crouch, Oppewal, Huybers, Dolnicar, Louviere & Devinney, in press) reporting the results of a study of typical household expenditure categories, including domestic and overseas vacations. The paper describes the substitution between expenditure categories as identified at the aggregate level, for an Australia-wide representative sample. It quantifies competitive relationships between different types of household discretionary spending, and illustrates that an exclusive focus on the absolute level of disposable income as an explanatory variable in (for instance) tourism demand models results in misleading conclusions about the effects of income changes if it is not taken into account that

households are faced with competing spending options. The study reports the overall shares that different expenditure categories receive and, in addition, analyzes how particular categories compete among each other. With respect to vacation spending behavior, it is found that not only do domestic and overseas vacations compete more heavily among each other than they compete with other expenditure categories, but that domestic vacations also compete with home renovations more than with other expenditure categories. Spending on domestic vacations is especially low if people can choose to spend their extra discretionary income on home renovations and/or on an overseas vacation.

This study is consistent with Morley's (1992) proposition that the decisions about whether to travel or not, the particular vacation chosen and the level of non-vacation spending – subject to time and budget constraints – are interdependent and occur simultaneously. However, both Morley (1992) and Crouch, Oppewal, Huybers, Dolnicar, Louviere & Devinney (in press) examined individual's choices to engage in tourism activities at the aggregate level. Managerially, however, it is also of interest to know not only that such competitive relationships between spending options exist for the entire population, but also to be able to identify subgroups of the total market that have specific propensities to spend discretionary funds. From a tourism perspective, it is of particular relevance to identify individuals who prefer to spend additional available funds on vacations as opposed to other alternatives. These people would represent an attractive market segment to target. However, effective targeting requires that: (1) these individuals can be identified, (2) that they can be accessed and (3) that, as a group, they are large enough to justify customized marketing action.

The purpose of this paper is to explore this possible segmentation; that is, to derive segments of consumers that have a high propensity of spending discretionary income on tourism and, in so doing, extend our work on discretionary expenditure trade-offs to account for the heterogeneity of household discretionary expenditure. The paper thus extends the work on substitution between discretionary expenditure categories by investigating whether heterogeneity in people's propensity to spend additional discretionary funds can be used to develop actionable segments addressable by marketing activities. Similar to the authors' aforementioned previous study, and in contrast to most other work on tourism expenditure, this advances our knowledge by: (1) including all members of the public instead of only those people who chose to take a vacation, (2) taking into account the dependency between tourism expenditure and expenditure on other items of discretionary expenditure, and (3) deriving data-driven segments using an array of variables instead of testing segments that are *a priori* defined from single income or tourism expenditure variables. This approach implicitly accounts for competitive relations between expenditure categories for each individual.

This article will proceed by outlining prior work in tourism expenditure-based segmentation, overviewing the research approach and sample employed, and presenting the results from a bagged clustering analysis that is combined with a binary logit analysis. The approach is designed specifically to facilitate the interpretation of the derived cluster of 'vacation prone' spenders. Both academic and practical implications are provided, based on the approach and results uncovered.

2. EXPENDITURE-BASED SEGMENTATION

Market segmentation has developed to become a standard technique of exploratory market structure analysis. The term "market segmentation" describes a large family of possible ways to group individuals. At a most basic level, one can distinguish between commonsense (*a priori*), and data-driven (*a posteriori*, *post-hoc*) segmentation approaches. In the case of commonsense segmentation, a grouping criterion is known in advance. For instance, age groups or countries of origin are typical commonsense segmentation bases widely used in tourism. When no single grouping criterion is evident, data-driven segmentation techniques can be used to investigate whether managerially useful market segments can be derived. Typical examples of data-driven segmentation in tourism are those based on travel motives, activities during a vacation or any vacation related behaviors, such as information sources used in deciding which vacation option to make.

Generally, psychographic approaches to data-driven segmentation dominate academic segmentation research. According to Baumann (2000), 41% of the studies in the wider field of business administration use a psychographic segmentation base, only 21% use behavioral variables, 19% use demographic data and none use socio-economic information. For studies in tourism research, these percentages are 77%, 21%, 2% and 0%, respectively.

Expenditures have frequently been used as descriptors of segments which have been identified or constructed using a behavioral or psychographic segmentation basis (for instance, Jang, Bai, Hong and O'Leary, 2004; Opperman, 1996; Rubin and Nieswiadomy, 1994). A number of studies have, however, specifically aimed at

constructing segments based on their expenditures. These studies can be classified as typical *a priori* segmentation studies where respondents are split on the basis of their expenditures and then profiled using additional personal characteristics and travel-related information. Studies of this nature include work by Pizam and Reichel (1979) who compared Big Spenders with Little Spenders, which are constructed as extreme groups based on total household travel expenditures in one year. They found that education, community size, marital status, the market value of the owned home, the number of cars and ethnicity of the household lead to discrimination between the two groups. Spotts and Mahoney (1991) grouped respondents into three groups, based on their total travel expenditures during a trip. Heavy spenders emerged as more likely to have children, to travel with a larger party size, to stay on vacation longer, and to be more involved in recreational activities. Mok and Iverson (2000) grouped visitors to Guam into three segments based on their level of total expenditure during their stay. They found significant differences in certain aspects of travel behavior and motivation; age emerged as a significant factor with younger tourists spending more, while income was not found to be associated with membership of expenditure segments.

Bone (1991) reviewed segmentation studies of mature market segments and extracted the five most important segmentation criteria, one of which was discretionary income. Only one of the 33 reviewed studies actually used income as a segmentation base, with none using expenditure. Yet Bone emphasized the importance of discretionary income, in particular "since it is probably more closely tied to purchase behavior than is total income" (p. 21). While acknowledging the importance of relating income to actual purchase behavior, Bone's proposed discretionary income variable does not account for

competition between alternatives in terms of expenditures, including the option of saving money instead of spending it.

In summary, it can be concluded that although travel expenditures are frequently a component in empirical tourism research, they are rarely used as a basis for segmentation to actually identify different segments of tourists. When expenditures are used, the results indicate that they provide valuable insights into how segments of tourists with different expenditure patterns can be translated into marketing actions. Furthermore, as the majority of studies do use total expenditures during the entire trip or expenditures for certain categories of vacation costs, they limit their findings only to travelers and ignore substitution with other categories of expenditure. These substitution patterns can only be revealed by examining the entire allocation of expenditure across the individual or family budget.

2.1 Study Methods

2.1.1 Survey Design and Administration. A questionnaire was developed and pre-tested that contained questions on spending preferences for eight expenditure categories (financial investments, reducing household debt, home improvements or renovations, home entertainment equipment, leisure activities, domestic vacations, overseas vacations, and donations to charity), various aspects of travel behavior and travel motivations, as well as a choice experiment (Louviere, Hensher, Swait, 2000) in which respondents were asked to allocate A$2,000 to subsets of these categories. Pretesting of the survey tool confirmed that this amount was considered to be a reasonable windfall that respondents perceived as sufficient to be able to allocate it towards all the

expenditure alternatives offered. This so-called "stated preference experiment" was chosen because no suitable revealed preference data was available for modeling purposes (Crouch and Louviere, 2001).

The eight expenditure category subsets presented to each respondent were derived from a 2^7 fractional factorial main effects design, thus assuring that all expenditure alternatives occurred equally often without having to use all theoretically possible combinations (full factorial). Balancing of expenditure type occurrences ensures independence of expenditure type effects in the model analyses. One additional expenditure type (donations to charity) was added to each scenario as a constant base alternative for the analysis. Respondents were informed that the A$2,000 was made available to them as a one-off payment that was not taxable and could be spent entirely at their discretion. The plausibility of this approach was enhanced by a decision by the Australian government, shortly before this research was conducted, to make a one-off payment to many Australian households related to family benefits. Therefore, such a hypothetical windfall payment occurred in an environment that conveyed a degree of realism. In addition, respondents were asked questions relating to their travel behavior and motivations.

The survey was conducted through Pureprofile, an "opt-in" internet panel representative of the Australian population (in terms of census statistics). Panel members hold an account in which they accumulate the small amounts they receive as compensation for participation in panel surveys. For the current survey 2,766 members were invited to participate in order to ensure that at least 1,000 completed surveys would be obtained. The final sample included 1,053 respondents, representing a response rate of 38 percent. The socio-demographic profile matched the population socio-demographics well.

2.1.2 Cluster Analysis. The eight expenditure categories outlined earlier were used as the base for the data-driven segmentation component of this study. In each case a variable was derived from the choice tasks of respondents by summing up all the dollar allocations each respondent made across all eight choice tasks for each of the expenditure categories. Figure 1 shows box plots of these variables. As can be seen, respondents generally chose to spend the highest proportion of the A$2,000 to repay debt, followed by financial investments and renovations. Overseas and domestic vacations ranked fourth and fifth in terms of average dollar allocations across all respondents.

----- Insert Figure 1 here -----

In order to account for trade-off relationships between all expenditure categories when constructing the segmentation, the individual level average allocations for all eight kinds of possible expenditure were used as a segmentation base and fed into a bagged clustering algorithm (Leisch, 1998; 1999). The bagged clustering procedure offers many advantages over more traditional data-driven segmentation methods such as single employment of k-means clustering. Bagged clustering results are less dependent on the starting solution as several independent computations form the basis of the final segmentation; they are more stable than classic clustering algorithms due to the inherent replication process; they are less dependent on the data set at hand as numerous bootstrap samples are used as starting points for the repeated calculations; and niche segments can be identified more easily than with classical algorithms like k-means,

which tend to produce segments of equal size (Leisch, 1999; Dolnicar and Leisch, 2004). Bagged clustering has been used successfully for tourism market segmentation in the past (Dolnicar and Leisch, 2000; Dolnicar and Leisch, 2003)

The fundamental logic behind bagged clustering is to increase the stability of the final result by computing repeated runs of the partition and combining the results into a final segmentation solution. The solution of the k-means algorithm is known to represent only a local optimum so a slight variation in data set structure or starting points for clustering can lead to quite different segmentation solutions. This effect is avoided by repeating the computation and drawing samples from the original data (bootstrapping). Bagged clustering consists of the following steps: (1) bootstrap samples are drawn, (2) a base method of the researcher's choice (e.g., k-means) is run on each of the bootstrapped samples, resulting in a predefined number of centers (representing the segments), (3) these centers are used to create a new, derived data set to which (4) a hierarchical clustering algorithm is applied.

For the bagged clustering computations undertaken here, the k-means algorithm based on Euclidean distance computations was chosen as the base algorithm, 20 centers were derived from each of the 10 runs of the base computation, and average linkage hierarchical clustering was used on the derived data set. The dendrogram resulting from the hierarchical computation helped to decide the number of clusters selected. The resulting segments were plotted and interpreted and subsequently analyzed using binary logistic regression to assess whether the segment with the highest stated propensity to spend additional discretionary expenditure on vacations could be predicted on the basis of socio-demographic, behavioral and psychographic information. The model quality was assessed by benchmarking it to a null model and testing the relationship between

actual and predicted segment members. All computations and graphics were undertaken using the R software package for statistical computing (R Development Core Team, 2004; R functions for bagged clustering are part of the e1071 extension package for R and freely available from http://cran.R-project.org.).

2.2 Discussion

2.2.1 Clustering Results. The bagged clustering computation discussed above led to a clear recommendation regarding the number of clusters that should be chosen for the final segmentation solution. The top part of the chart shows a typical dendrogram that is derived from the hierarchical clustering procedure. It shows the merger steps that took place throughout the clustering algorithm. The peak in the line chart under the dendrogram in Figure 2 is based on the dendrogram distances (absolute height depicted in black, first differences depicted in grey) and suggests seven segments.

----- Insert Figure 2 here -----

This seven-segment solution led to the segment profiles in Figure 3; the line that runs across all expenditure categories indicates the sample average allocations for each category (the mean values from Figure 1) and the box plots represent the segment allocations. Segments are profiled by interpreting the deviations of the segment allocations from the overall sample average. The higher the deviation from the sample mean and the lower the dispersion of allocations within the segment, the more distinctly can a segment be characterized.

As can be seen in Figure 3, members of Segment 1 (which contains 53% of all respondents) can best be described as allocating a very high proportion of the A$2,000 to paying off debt (variable labeled CDEBT in Figure 3). Except for a few outliers, all members of this segment demonstrate above average allocations for debt reduction, with expenditures for vacations clearly below average for the majority of segment members. Segment 2 (16% of respondents) appears to be the most relevant in light of the objective of this study as every segment member spends distinctly more on overseas vacations (CHOLID_1) than is the case for the total sample. In addition, the majority of segment 2 members also demonstrated above-average allocations for domestic vacations (CHOLIDAY), with below-average allocations made to reducing debt, financial investments (CINVEST) and home renovations and improvements (CRENOVAT). Segment 3 (8%) appears to contain the home renovators. Members of this segment all allocate significantly more to home renovations than the total sample as a whole. Domestic vacations are allocated an average amount, with below-average contributions given to overseas travel. Segment 4 (10%) shows a clear preference for financial investments but also displays above average allocations to home entertainment equipment (CENTERTA). Segment 5 (4%) makes below average allocations to all categories, indicating that these respondents prefer to allocate more to personal purchases and other expenditure not listed in the choice task. The most distinct feature of Segment 6 (5%) is the high level of allocations to home entertainment equipment. Finally, Segment 7 represents only 4% of the sample, but allocates a very high amount of their discretionary funds to domestic vacations.

Overall, although several segments seem relevant from the perspective of vacation expenditures and could provide valuable practical insights if investigated in detail, we

focus on Segment 2 in the present study because it appears especially interesting from the perspective of a destination manager: almost all members of this segment allocate more than the average to overseas and domestic vacations while facing little competition for discretionary expenditure from other categories.

----- Insert Figure 3 here -----

Segment-specific substitution effects between expenditure categories also become visible in this analysis. For instance, Segment 3 displays a negative relationship between reducing household debt and spending on home renovations and improvements. All members of this segment seem to spend more money on renovations than the average Australian, while at the same time, all of them would spend less on reducing household debt. The profiles also show that some segments considered more than one expenditure category. That is, some of the segments clearly allocated their discretionary expenditures into two or more categories. For example, Segment 6 allocates above average amounts to both home entertainment equipment and leisure (CLEISURE), suggesting an opportunity to cross-market to that particular segment.

2.2.2 Cluster Descriptions. The additional information available from the study was used to determine whether Segment 2, which contains those respondents most inclined to spend additional discretionary income on a vacation while not typically considering other expenditure categories, is distinct in terms of socio-demographic variables (gender, age, household status, income, etc.), travel-related behavior (number of vacations taken, accommodation used, sources of information for the trip, etc.) and

psychographic variables (vacation motivations). Binary logistic regression analyses were conducted to determine if Segment 2 is distinctly different with respect to those personal characteristics. This was achieved by undertaking the following steps. First, category frequencies were investigated for all descriptors to assure that sufficient respondents were available in each category. For those variables for which this was not the case, categories were combined. Second, respondents who did not provide answers to all the questions to be included in the regression were eliminated (14 respondents, including members and non-members of Segment 2). Finally, based on these preliminary analyses, a binary logistic regression was conducted. The coefficients for the resulting model are provided in Table 1.

The binary logistic regression result leads to the conclusion that many personal characteristics significantly discriminate between members of Segment 2, the group that is inclined to use additional discretionary expenditure for vacations while not considering other expenditure categories as equally attractive investment of discretionary funds, and other respondents. Single adults without children are significantly more likely to be members of Segment 2, whereas the opposite is the case for partnered or married couples with children. While the number of children in the household is systematically associated with lower odds of being a Segment 2 member, the opposite is true for larger numbers of people living in the household, indicating that the typical Segment 2 member may be sharing accommodation with others who are not family members. The more respondents spent on financial investments, the less likely it is that they are members of Segment 2. In contrast, if they spent more on overseas vacations they are more likely to be members of Segment 2. Similarly, if they undertake more vacations, they are more likely to be a member of Segment 2.

With respect to sources of information respondents use prior to their vacation, the odds of being a Segment 2 member decrease if they state not to need any information at all, to rely on information from friends and relatives, or to inquire at tourist offices in the home country. They increase, however, if the respondent uses information and brochures from a tour operator. Travel motivations that increase the odds of being a member of Segment 2 include looking for fun and entertainment, seeking an intense nature experience, wanting to have everything organized, and seeking cultural offers and sights. Respondents concerned about unspoilt nature and a natural landscape at the vacation resort, however, are less likely to be a member of Segment 2.

----- Insert Table 1 here -----

In summary, a prototypical member of Segment 2 could be described as follows: he or she is single, does not have children, lives in a large household, possibly in shared accommodation, and takes vacations frequently. The level of expenditures for overseas vacations is high, whereas little money is directed towards financial investments. When preparing to take a vacation, the tour operator is an important source of information. The perfect vacation should include components of fun, nature experience (such as sun and beach) as well as culture and sightseeing and should be well organized.

3. CONCLUSION

This study explored whether heterogeneity of households with respect to their discretionary expenditure preferences could be used to explore the existence of market segments that are distinct, both with respect to their discretionary expenditure

preferences and personal characteristics. Such segments would be excellent target markets for tourism offers, as the likelihood of individuals in these segments diverting additional income into vacations facing little competition from other spending or investment alternatives would be significantly higher than would be the case for other groups in the population.

Based on data from a choice experiment in which respondents were confronted with a series of allocation tasks of discretionary expenditure, a data-driven market segmentation approach revealed one particularly suitable segment. Members of this fairly substantial segment (16% of the Australian population) demonstrated a very distinct preference for diverting additional discretionary expenditure towards vacations. The segment was explored further with respect to personal characteristics leading to the conclusion that members are distinctly different in a number of aspects relevant to tourism marketing. Their household composition differs for the average Australian household, with singles without children being over-represented. They spend more money on overseas vacations and less on financial investments than the general population. They also demonstrate distinct patterns of information search and travel motivations. This knowledge can be translated directly into marketing action to communicate more effectively with this segment.

Some of the typical socio-demographic characteristics revealed in previous studies that investigated differences in total vacation expenditures were not confirmed: neither age nor income significantly discriminated between Segment 2 members and the other respondents. However, an alternative commonsense segmentation approach could be taken in future if implicitly accounting for low competition of discretionary expenditure for tourism with other categories would not be of central interest: simple commonsense

segments could be profiled on the basis of highest allocations in the overseas and domestic vacation category. Clearly, such segments would investigate only one expenditure category as a basis and are expected to lead to significantly different profiles than those revealed in the present study where the aim was to not only seek for respondents with high propensities to spend additional income for vacations but also assure that they do not consider any other expenditure alternatives as alternative investment or spending options for discretionary funds.

The findings derived from this study are relevant to both tourism managers and policy makers. Tourism managers can increase the effectiveness of their marketing messages by being more selective in their targeting. Policy makers can use the findings about substitution between expenditure categories to better evaluate the impact of policy measures on household expenditures. However, there is one very interesting question for both these stakeholders that could not be answered in the present study and that would be interesting to investigate in future: What is the household's propensity to decrease expenditure in these categories if the financial situation worsens? In this study, the aim was to find markets with a high propensity to direct additional discretionary expenditure towards tourism spending. While this is highly relevant information for the tourism manager in times when additional discretionary expenditure is available, these same segments could turn out to also be the first to save on tourism expenditures when times are bad. The segments determined in this study do not permit generalization to the case of reduced discretionary expenditure. Identifying segments which have a low propensity to reduce tourism expenditures in bad times would be a highly interesting question for further research; the investigation of heterogeneity in propensity to reduce expenditure could lead to the identification of more and less crisis-resistant segments.

Furthermore, the experimental setup does not permit us to make any conclusions about multi-year expenditure or saving strategies where individuals may, for instance, choose to save up for a holiday over multiple periods of time. This kind of behavior could not be directly modeled by the choice tasks used in the present study. Finally, it would be interesting to replicate this study to other populations.

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6. FIGURES AND TABLES

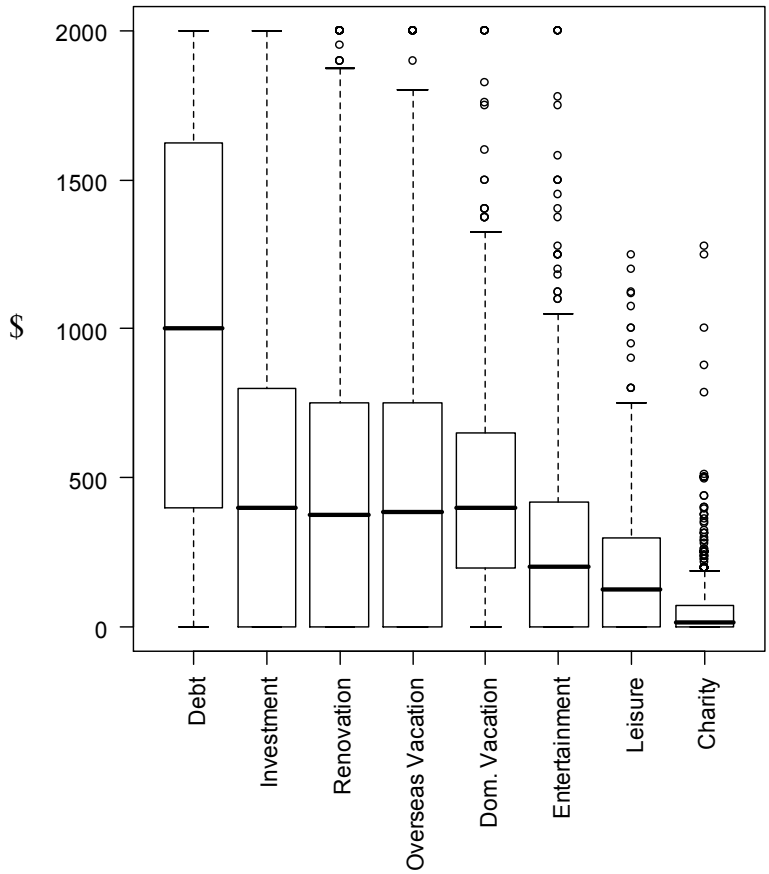

Figure 1. Box plot of dollar allocations

across expenditure categories by all respondents

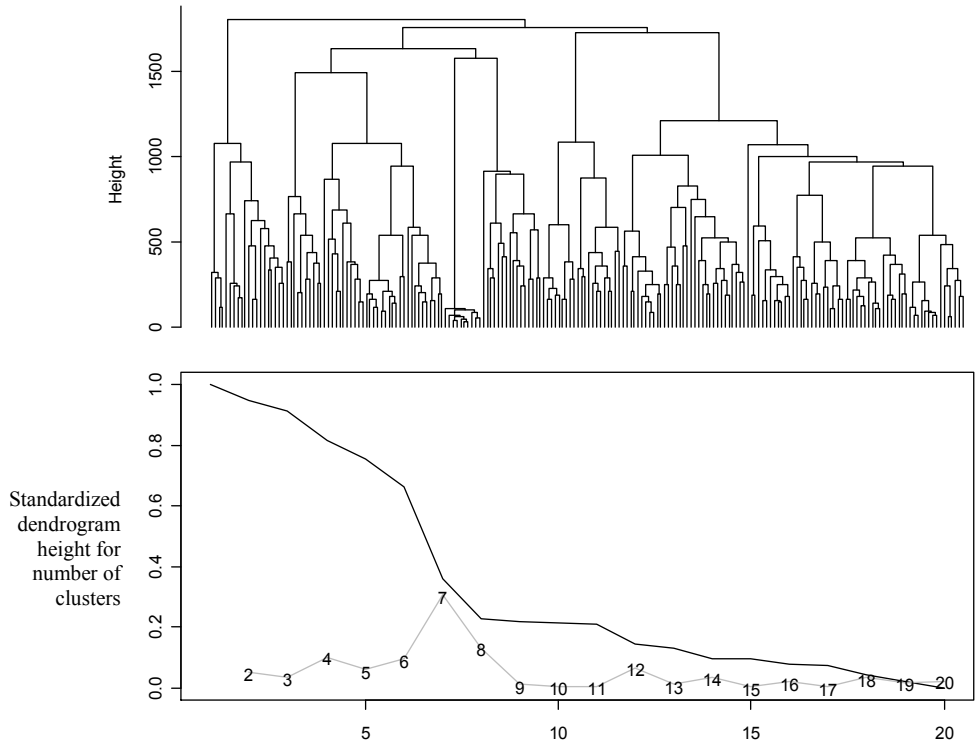

Figure 2. Bagged clustering dendrogram

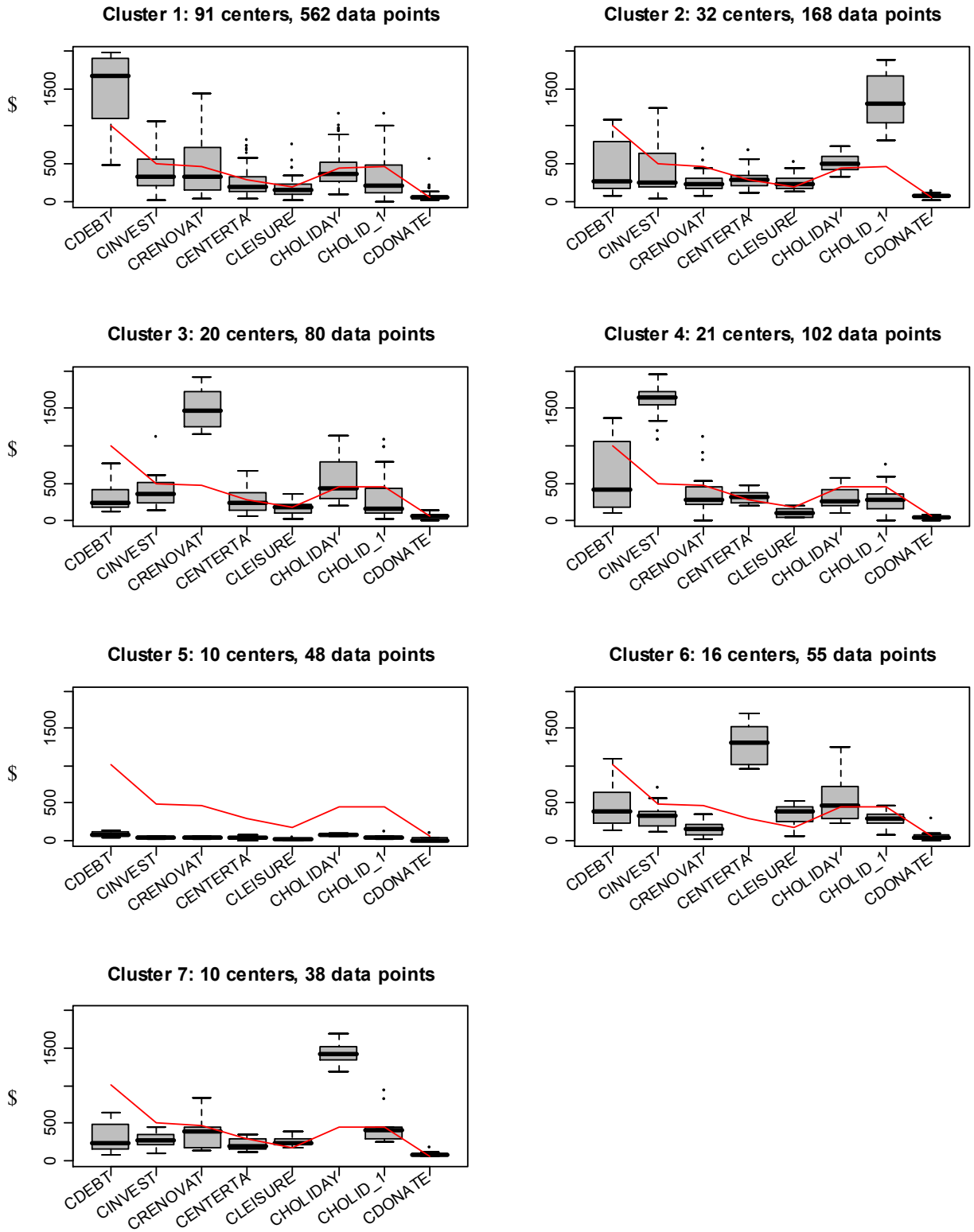

Figure 3. Data-driven discretionary expenditure segments

Table 1. Binary logit regression coefficients

	Coefficient	Std Error	Wald	Sig.
Gender	-0.08271	0.0935	0.7828	0.3763
Household Situation:				
One adult without children	0.48059	0.2151	4.9940	0.0254
One adult with children	0.22325	0.2885	0.5990	0.4390
Partnered / married couple without children	-0.13993	0.1805	0.6013	0.4381
Partnered / married couple with children	-0.67108	0.2045	10.7679	0.0010
Expenditures on Financial Investments	-0.00003	0.0000091	8.9302	0.0028
Expenditures on overseas vacations	0.00004	0.0000210	3.2937	0.0695
Number of people in the household	0.32259	0.0983	10.7753	0.0010
Number of children in the household	-0.57522	0.1842	9.7509	0.0018
Typical number of vacations	0.09909	0.0527	3.5309	0.0602
Travel Information:				
Don't need any information	-0.54348	0.3497	2.4151	0.1202
Brochures from tour operator	0.48629	0.2793	3.0324	0.0816
Information / reports from friends, relatives	-0.33713	0.2053	2.6954	0.1006
Information from tourist offices in my home country	-0.90562	0.4511	4.0297	0.0447
Travel Motivation:				
I am looking for a variety of fun and entertainment	0.39255	0.1891	4.3115	0.0379
The special thing about my vacation is an intense experience of the nature	0.40729	0.2575	2.5028	0.1136
It is important to me that everything is organised and I do not have to care about anything	0.54811	0.2523	4.7189	0.0298
When I choose a vacation-resort, an unspoilt nature and a natural landscape plays a major role for me	-0.59845	0.2811	4.5319	0.0333
Cultural offers and sights are a crucial factor	0.51279	0.2134	5.7762	0.0162
Constant	-2.50383	0.3442	52.9229	0.0000

Fit statistics:

Cox & Snell R Square: 0.091, Nagelkerke R square: 0.156, McFadden R Square: 0.144,

84% overall correct membership prediction.