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Bronner, A.E.; de Hoog, R.

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Tourist Demand Reactions: Symmetric or Asymmetric across the Business Cycle?

Fred Bronner¹ and Robert de Hoog²

Abstract
Economizing and spending priorities on different types of vacations are investigated during two periods: an economic downturn and returning prosperity. Two nation-wide samples of vacationers are used: one during a downturn, the other one at the start of the recovery period. Through comparing the results, conclusions can be drawn about symmetric or asymmetric tourist demand across the business cycle.

The main summer holiday has an asymmetric profile: being fairly crisis-resistant during a recession and showing considerable growth during an expansion. This does not apply to short vacations and day trips, each having a symmetric profile: during a recession they experience substantial reductions and during expansion comparable growth. So when talking about tourist demand in general, one cannot say that it is symmetric or asymmetric across the business cycle: it depends on the type of vacation. Differences in tourist demand are best explained by the role of Quality-of-Life for vacationers.

Keywords
business cycle, (a)symmetric tourist demand, quality of life, income elasticity, tourism marketing

Introduction
During the economic developments in the Western world over recent years, two periods stand out. A period of adversity starting in the United States in December 2007 and spreading to Europe in the final quarter of 2008, followed by a period of recovery beginning in the last quarter of 2014. This development between 2007 and 2015 shows a W-shaped pattern (Bronner and de Hoog 2012, 2014; Li, Blake, and Cooper 2010; see also Figure 1). The downturn period was the first to occur since the crisis in the 1970s and early 1980s (see Frechtling 1982) and had serious consequences because people lost their jobs or became afraid of future job loss and job vulnerability (Alegre, Mateo, and Pou 2013; Papatheodorou and Pappas 2016). Many consumers saw their income and savings reduced and started to distrust the banking world. Furthermore, income inequality steadily increased (Meyer and Sullivan 2013) and consumers spent less on goods and services (Kamakura and Du 2012). Consumer cutbacks in this crisis period affected luxury goods disproportionately (Smeral 2009). Thereafter, the onset of the recovery attracted much media attention. In national European newspapers, there appeared headlines such as “economy big plus,” “lean years seem really over,” “labor market thrives on,” “more advertising in newspapers and online,” and “house prices rise.” It can be assumed that this media attention on a new prosperity cycle will have influence on consumer behavior. However, because of the recency of this period of economic upturn, not much knowledge is available about differences between consumer behavior during these periods of adversity and prosperity between 2007 and 2015. In this contribution, we investigate differences and similarities in consumer spending intentions in a period characterized by a rather sudden economic downturn and a period characterized by gradually returning prosperity. This investigation is based on two samples of Dutch vacationers: the first sample was interviewed in 2013 at a low-point moment in the crisis period; the second study was carried out in 2015 at the start of the recovery period. By comparing the results of both studies, conclusions can be drawn about consumer behavior, in particular that of vacationers, during a cycle of adversity and prosperity. The main focus of attention will be placed on the development of tourist demand, not in isolation, but as compared with other goods and services, and on the question as to whether tourist demand is symmetric or asymmetric across the business cycle.

Why is insight into this phenomenon important? Sheldon and Dwyer (2010) stress the importance of this kind of data for the tourism industry: “our lack of knowledge about possible consumer responses to the crisis places great impediments in the way of forecasting its effects on the industry”

¹University of Amsterdam, Faculty of Social and Behavioral Sciences, Amsterdam, the Netherlands
²University of Twente, Faculty of Behavioral Sciences, Enschede, the Netherlands

Corresponding Author:
Robert de Hoog, University of Amsterdam, Faculty of Social and Behavioral Sciences, Jan Benningstraat 50, Amstelveen 1181SE, the Netherlands.
Email: r.dehoog@utwente.nl
Figure 1. Profiles of spending priorities on goods and services during adversity and prosperity.

(p. 4). Papatheodorou, Rossello, and Xiao (2010) make a similar remark: “the tourism industry is in crying need of information and knowledge for decision making and for strategies to effectively respond to the current situation” (p. 39). In addition, the economic situation also has consequences for marketing strategy: “managers need to change their message strategies in accord with changing economic conditions” (Lee, Taylor, and Chung 2011, 87). These three quotes are from the starting period of the crisis and, given the fledgling recovery, we can apply these quotes to both periods, paraphrased as “our lack of knowledge of consumer responses to the crisis and recovery after the crisis.”

Theory and Research Questions

In a period of recession, consumers have to develop a strategy to save money, either by cheese-slicing or pruning (Bronner and de Hoog 2012), and in a period of recovery they have to decide to which goods they will allocate higher expenditures (Eugenio-Martin and Campos-Soria 2014). The cheese-slicing strategy seems to be dominant in the crisis period, as studies in several countries show: going less far (staycation, Bronner and de Hoog 2014), average stay reduction (Sedmak and Planinc 2011; Cellini and Cuccia 2015), cheaper accommodation (Alegre and Sard 2015), and a combination of reduced length of stay and cheaper accommodation (Campos-Soria, Inchausti-Sintes, and Eugenio-Martin 2015). Tourists want to keep traveling despite the crisis and don’t give up their holiday (Campos-Soria, Inchausti-Sintes, and Eugenio-Martin 2015; Cellini and Cuccia 2015). For these holiday decisions, the distinction between luxury goods and necessary goods plays a crucial role. In economic theory, a good is a luxury good if the consumer increases spending on it during a period of economic growth and decreases spending on it during a period of economic contraction. These goods are desirable for making life easy and luxurious and will be seriously affected by price or income changes because giving them up does not touch upon the essentials of life. In contrast, necessary goods are goods one cannot live without and one will likely not cut back on, even when times are tough. If there is a rise in income, a consumer can spend more on a necessary good, but this will be less than proportional to the rise in income (income \([\text{in-}]\)elasticity). Which goods are considered to be luxury goods and which are considered to be necessary ones? In the literature, various classifications can be found. For the present investigation, we selected four examples of studies that classify a variety of goods and services as being luxuries or necessities. These studies demonstrate the diverging approaches used to define the necessity–luxury continuum. A selection was made based on the inclusion of (1) various authors, (2) various years of publication, and (3) various approaches and definitions. The studies included are the ones by Kemp 1998; Heffetz 2011; Kamakura and Du 2012; and Henry 2014. For each study, a brief summary of the chosen approach is sketched below.

The purpose of the article written by Kemp (1998) is to empirically explore people’s ideas about what are seen as luxury and necessary goods. Different goods (21) were rated by respondents on a 9-point scale ranging from 1 (complete necessity) to 9 (complete luxury). In this way, people’s perceptions are measured: it is an attitudinal approach. If the average score is above the overall mean, the good is considered to be a luxury good. Bearden and Etzel (1982) use a comparable procedure with a 6-point scale (1 = a luxury for everyone to 6 = a necessity for everyone).

Heffetz (2011) selects 29 consumption categories. Based on Engel curves (graphical representations of the relation between income and expenditure shares reported as a percentage of total expenditures), income elasticities are estimated. As income increases, the proportion of the income spent on necessities falls and the proportion spent on luxuries increases. Based on this expenditure, elasticities are calculated. The classical definition is used: an elasticity above 1.0 defines a luxury good and an elasticity below 1.0, a necessary good.

The Kamakura and Du study (2012) is based on the Consumer Expenditure Survey for the period 1982–2003. It is a repeated cross-section approach. The data are the dollar amounts allocated by each sample household on 32 consumption categories during a one-year window. The percentage changes in expenditures under different scenarios have been calculated (periods of contraction and periods of growth in per capita GDP in the period 1982–2003). Expenditures on luxuries experience substantial falls and rises under the different scenarios. Contrary to this pattern, expenditures on necessities are more stable. Goods are characterized as being luxuries or necessities based on this stability or volatility.

Henry (2014) bases his analysis, as do Kamakura and Du, upon the Consumer Expenditure Survey series, but uses a broader range of years: 1984–2012. He selects 23 categories of goods and for the 5 income quintiles he calculates the share of each consumption good in relation to the total real consumption. A good is classified as luxury if more of it is consumed—on a percentage basis—as real income levels
increase (which in Henry’s study range from lower to higher income quintiles).

For the first measurement—based on 2013 data (economic downturn, Bronner and de Hoog 2016a)—13 consumer goods were selected, including 3 that capture tourist demand (main summer holiday, short in-between vacations, and day trips away from home) and reused these in exactly the same way for our second measurement moment (economic expansion). This selection was done using a theoretical product classification framework based on the visibility and essentiality of products, leading to a set of products representing high/low visibility–high/low essentiality (for more details, see Bronner and de Hoog 2016a). The resulting set of products shows a sufficient variety in product categories that, under different names, also occur frequently in the literature. In order to link the literature discussed above to the goods that are part of our study, Table 1 shows the 13 goods from our study in the first column. In order to match these goods with the ones included in the studies summarized above, some interpretation was needed, as it is rare that the names used by these authors and the names of our selected goods are the same. In columns 2, 3, 4 and 5 in Table 1 are the classifications, as made by the four authors, of a good as a luxury or a necessary one. An empty cell indicates that in that study there was no good included that was comparable with one of our 13 goods.

When considering the results of this literature overview about the necessity–luxury continuum, the first point that draws attention is the lack of interest of these economically oriented studies in tourist demand. Even the main summer holiday is missing in all studies. Also, the authors do not agree on the position of all goods on the continuum, for example: mobile phone and body care. This indicates that there are different classifications of goods in different periods and that they are based on different measurement methods. Furthermore, these authors assume a symmetric consumer expenditure pattern during adversity and prosperity. Kamakura and Du (2012, 246) explicitly admit this: “our modeling framework assumes a symmetric effect of economic contraction/expansion on consumption preferences.” This symmetry assumption implies that goods are either luxury or necessary ones. But other authors express doubts about the plausibility of this assumption of symmetry and the implied classification of goods into these two categories only. Alegre, Mateo, and Pou (2013, 39) criticize it: “during a period of economic crisis, unemployment might affect the structure of household expenditure in a greater way than it does during an upturn in the economic cycle, when there are better prospects of finding a job again.” In this case, the expenditure patterns during adversity and prosperity are asymmetric, and as a consequence goods cannot be either luxuries or necessities, but can belong to other categories. In the literature, asymmetric means that the expenditure pattern in one phase of the cycle is not the mirror image of the pattern in the opposite phase (Smeral 2012). Smeral and Song (2015) investigated asymmetry of tourist demand in more depth (see also Smeral 2014). They make a distinction between price elasticity and income elasticity. The first focuses on the effects of changes in prices on the demand for a product: if the price goes down, is the increase in demand equal to the reduction in demand when the price goes up? The second focuses on the effects of income changes on the demand for a product: if income grows, is the increase in demand equal to the decrease in demand when income declines? Based on an analysis of aggregated tourism data, they conclude that that “the income elasticities of the source markets analyzed are not stable across the business cycle” (Smeral and Song 2015, 148). In other words, tourist demand, according to them, is asymmetric. Based on this literature, we conclude that demand reactions concerning vacations across the business cycle can be symmetric or asymmetric. According to our view, both types of reactions can have two different shapes.
Symmetric tourist demand reactions are characterized by the fact that expenditures during adversity and prosperity are the mirror image of its opposite phase of the cycle (Smeral 2012). This can occur in two shapes: the first is that across the business cycle, approximately the same amount of money is spent during periods of adversity and prosperity, which we will label as “symmetric constant.” The second is that across the business cycle expenditures substantially change but the amount economized during adversity is approximately the same as the amount that is spent more during prosperity; this we will label as “symmetric mirror.” The symmetric constant shape is characteristic for classic necessities and the symmetric mirror shape for classic luxuries.

Asymmetric demand reactions also exhibit two forms. First, across the business cycle what is economized during adversity is a larger amount of money than what is spent more during prosperity/recovery, which we will label as “asymmetric negative.” Second, what is economized during adversity is a smaller amount of money than what is spent more during prosperity, which we will label as “asymmetric positive.” Clearly these two forms do not fit into the luxury–necessity categorization.

The focus of this study is on investigating whether different types of vacations exhibit different demand reactions across the business cycle, fitting into either of the two types of symmetry or the two types of asymmetry identified above.

Taking the economic contraction period and the economic expansion period as starting points, we can construct a theoretical framework that allows the positioning of different goods in terms of two dimensions that can accommodate symmetries and asymmetries across the business cycle:

- **Dimension 1 (horizontal axis):** expenditure priority in times of economic expansion (increasing disposable income), ranging from a low expenditure priority (left-hand side of the horizontal dimension) to a high expenditure priority (right-hand side of the horizontal dimension)
- **Dimension 2 (vertical axis):** economizing priority in times of economic contraction (decreasing disposable income), ranging from a high economizing priority (lower end of the vertical axis) to a low economizing priority (upper end of the vertical axis)

The focus is on disposable income, that is, income elasticities, and it has been chosen because it is very hard to fix a price for a vacation. Vacations are highly configurable: there are almost as many “vacations” as there are vacationers, each having its own unique price. Changes in disposable income are easier to define and identify based on data collected by statistical agencies. There is also a difference between disposable income and the part of this disposable income one intends to spend on a holiday (see also Papatheodorou and Pappas 2016).

Figure 1 shows the two-dimensional framework. The four quadrants in Figure 1 are characterized by a profile. The quadrants LL and HH are the symmetric quadrants. Quadrant LL (the symmetric constant one) hosts the classic necessities that are fairly immune to changes in the business cycle; spending on them will stay more or less the same. Situated in quadrant HH (symmetric mirror) are products which are highly sensitive to changes in the business cycle; spending will go down substantially during the contraction period but will increase by approximately the same amount during the expansion period. The other two quadrants are asymmetric. The asymmetry quadrant HL (asymmetric negative) contains products which suffer during an economic downturn and cannot recover this loss during an economic upturn. The other asymmetry quadrant LH (asymmetric positive) has the opposite profile: economizing is limited during adversity but recovery is substantial during prosperity.

Which explanatory factors for asymmetric spending patterns are proposed in the literature? There is much attention on loss aversion as an explanatory factor (Kahneman and Tversky 1979; Smeral and Song 2015; Chan 2015) and on quality of life (Dolnicar, Yanamandram, and Cliff 2012; Uysal, Perdue, and Sirgy 2012; Uysal et al. 2016). Smeral and Song (2015) adopt prospect theory as an explanation for asymmetric tourism behavior, in particular, the notion of loss aversion. However, loss aversion is about losing “something.” In prospect theory this is almost always money, but if no money is involved the nature of this loss becomes less self-evident. If you are loss-averse concerning a vacation, what kind of loss do you have in mind? A vacation is a multifaceted, highly intangible experience and loss can be relevant to any of these facets or attributes. In their study of the economizing behavior of Dutch tourists, Bronner and de Hoog (2016a) found that in times of adversity the inclination to economize could best be explained by the concept of quality of life: those who judged vacations as contributing significantly to their QOL were less inclined to economize on a holiday than were those who found QOL less important. This indicates that at least in times of economic contraction, the loss associated with economizing on a vacation is a loss in terms of QOL.

Based on what has been said above, the main research question can be stated:

*Is the tourist demand for vacations during changes in the business cycle symmetric or asymmetric and which factors can explain this symmetric or asymmetric demand?*

In order to answer this main research question, three other more specific research questions will be answered.

*Research question 1:* What was the profile of the business cycle between 2008 and 2015 in the Netherlands?
The main research question supposes that there are changes in the business cycle and research question 1 should make clear what the nature of these changes were. The main concept used is changes in disposable household incomes in the period 2008–2015 at the national level.

Research question 2: Where can a set of goods and services, including three types of vacations, be placed within the theoretical framework, based on the dimensions representing economizing priority in a period of recession and expenditure priority in a period of recovery?

The expenditures for these three types include all regular costs like travel, accommodation, food, and admissions but we did not specify for the respondents these separate categories, and these are covered by the overall concept “Expenditures on a holiday” as used in the questionnaire. The three types of holidays include domestic and international destinations. The available data show that about 20% of the vacationers spend their holiday in the Netherlands, 15% in France, 11% in Spain, and 10% in Germany. Spending money on the main summer holiday covers 60% of the total holiday expenditures in one year (about 12 billion euros) in the Netherlands.

This research question will be answered based on data collected during a period of contraction and during a period of expansion of the Dutch economy. The data are individual priorities concerning economizing and increased spending on a set of goods and services during these phases.

Research question 3: Which factors explain the position of the three types of vacations in the empirically based positioning of these vacations within the different quadrants of the theoretical framework?

This question touches upon the discussion about the role of loss aversion. In 2013, the main factor explaining the economizing priorities turned out to be loss of quality of life. In 2015, is gain in quality of life also a driver for spending more on a holiday when the economic future brightens?

Research Design

Data

The samples in this study are from the Dutch “Continu Vakantie Onderzoek” (CVO [Continuous Vacation Panel]). This panel consists of respondents who report on their vacation behavior four times a year. It is refreshed annually. The CVO data are weighted for socio-demographics, resulting in a sample that can be considered as representative of the Dutch population for variables crucial to the vacation decision. The CVO is the standard survey about holiday intentions and behavior in The Netherlands. All large travel agencies, all Dutch airline companies, and most accommodation providers contribute money to this instrument and have as their main requirement that the sample be representative of the Dutch population for guiding their marketing efforts. Furthermore, the official governmental Dutch Statistical Agency (CBS) makes use of these data to report about the general holiday behavior of the Dutch population, and these reports are frequently quoted by news media and are available on the CBS website.

The fieldwork is carried out by TNS NIPO, one of the largest Dutch market research agencies. For data collection, CASI (computer-assisted self-interviewing) is used. Respondents can answer the questions at home at a time that is convenient to them and can take the time they require to answer the questions. This customer-friendly approach increases response and data quality, as was shown by Bronner and Kuijlen (2007).

Operationalization

During the two measurement moments, the main questions asked deal with the economizing and spending priorities of individuals. For this question, we used a forced-choice approach by asking people to first pick the three high-priority products they would economize/spend on and next the three low-priority products they would economize/spend on, leaving seven products, which were not selected, in the middle category. In our view, this is closest to natural spending behavior, where people are forced to make trade-offs between products. Using a 7-point scale for each product separately would not force people to make natural trade-offs, as they can easily choose the same value on every scale and thus evade a choice.

Description of the questions posed to the respondents (literal translation from the original Dutch version)

1. The economizing priority question (April/May 2013, contraction period sample, n = 5,454)

Question 1a. As you can see every day in the media, we are living in a period of less economic prosperity. Prospects for recovery are uncertain. Suppose that this year you have 10%–15% less money to spend due to these economic developments, and suppose that this decline continues for 2–5 years. Suppose that this causes you to economize: which product categories are the first that you will economize on? From the list of 13 product categories (theatre/cinema/musical/eating out; short in-between vacations; furniture; day trips away from home; magazines/newspapers; pc/tablets; mobile phone/smartphone; main summer holiday; apparel/shoes; body care/cosmetics; transport/car; energy costs; daily groceries from the supermarket), select the 3 that have the highest priority in terms of economizing.
Question 1b. Which three product categories have the lowest priority in terms of economizing?

2. The expenditure priority question (April/May 2015, expansion period sample, n = 966)

Question 2a. As you can see in the media, there is a gradual economic recovery. In the last weeks of 2014, articles appeared in the newspapers with headings like “we finally shake off the crisis.” Suppose that this year you have 5% more money to spend because of these economic developments and suppose that this progress continues for 2–5 years. Which of the 3 product categories in the list of 13 (exactly the same list as in the 2013 measurement is presented) have the highest priority in terms of spending more money?

Question 2b. Which three product categories have the lowest priority in terms of spending more money?

Concerning factors that can explain symmetric or asymmetric tourist demand, we included a set of questions for measuring the quality of life. In this approach, quality of life is an explanatory factor for tourism demand and is not meant as measuring how tourists actually feel during their holiday (Nawijn 2011). Furthermore, our measurement of quality of life does not address resident’s perceptions of the impact tourism has on their quality of life (Andereck and Nyaupane 2011).

3. The quality of life driver questions (In April/May 2013 and April/May 2015, identical items were presented to the respondents (see for a justification for including these drivers Bronner and de Hoog 2016a)

- Family cohesion
- To me, vacations are indispensable as regards having and maintaining good relations with my partners and/or children
- Well-being
- Vacations are essential for my well-being
- Physical health
- My health would suffer a good deal if I did not have a vacation
- Sacrifice savings
- In order to keep going on vacations, I am willing to use my savings
- Loss aversion
- I am so used to taking holidays that I will not readily sacrifice vacations.

All these items are measured using a 7-point Likert-type scale, which ranges from fully agree to fully disagree.

**Samples**

The 2013 sample consists of 5,901 respondents. For a variety of reasons, the economizing priority questions were not answered completely by all respondents, so 447 respondents were not included in the analyses of the economizing questions, leading to a sample size of 5,454 for the priority analyses. The 447 respondents excluded did not differ from the other respondents in terms of sociodemographics.

In 2015 the full CVO sample was around n = 7,000. For cost reasons we could not incorporate all our questions in this full CVO sample, and as a solution we administered these in a smaller subsample that was fully randomly drawn from the full CVO sample. Furthermore, the field work for the CVO is done in the same way by the same research agency and in the same period as in 2013. This arrangement contributes to the comparability of the 2013 sample and the 2015 sample.

In the Results section, the two samples will be compared on sociodemographics and it will be shown that there are no significant differences, so the studies can be compared.

**Methodological Issues**

This research design is characterized by three distinctive features.

A measurement method that circumvents causality problems. To obtain insight into consumer expenditure patterns at two different moments in time (recession and recovery), different options are available. Actual behavior can be compared, but then there arises “the difficulty of causally ascribing change in the patterns” (Kemp 1998, 598). A change of behavior cannot automatically be ascribed to income change. Other events may explain this change, such as stage of life events (marriage, birth), societal influence (sudden popularity of products), media attention (brand crises), and pricing strategies of suppliers. Our research measures behavioral intention. In the questions posed, the relation with different phases of the business cycle can be made explicit and scenario conditions are used with clearly specified income effects. This makes it more valid to attribute expenditure decisions directly to income changes occurring during these cycles. The same approach is advocated by Campos-Soria, Inchausti-Sintes, and Eugenio-Martin (2015, 167): “this paper avoids this potential bias since the decision to make a cutback was directly affirmed by the interviewee.”

Measurement having a high ecological validity. Ecological validity has a long history in social science (Lewin 1943). A high ecological validity means a situation that is as close as possible to natural behavior in the real world, with realistic tasks offered and realistic responses required (Schmuckler 2001). We did not opt for an approach using purely hypothetical decision scenarios (Benjamin et al. 2012), because they often have a low ecological validity. In this approach, one can explicitly refer to the actual economic situation in one scenario—for example, an economic downturn—and in addition simultaneously sketch another scenario, such as
“suppose the economy recovers, what would be your spend- ing behavior concerning. . . .” A disadvantage of this method is that the latter question is often unrealistic and unfamiliar to respondents in their actual life, leading to less reliable answers. Also, the researcher runs the risk that answers regarding both cycles are not independent of each other. In order to avoid these disadvantages, we used a design in which respondents had to answer questions about saving behavior in a period of recession and questions about spending more money in a period of recovery, which occur at different moments in time. In our opinion, this measurement procedure leads to a higher ecological validity.

**Measurement including a variety of goods and several explanatory factors.** In this study, 13 goods are presented to the respondents, 3 of which are related to tourist demand. By embedding economizing and spending decisions regarding tourism in the context of decisions about other product options, the decision task is made more realistic. In real life one always has to make choices between different products. As tourist demand is the main focus, for this good/service, factors that can explain the intention to save or spend money are incorporated in the study. In both measurements of this study, items are included to measure the role of drivers of the Quality of Life. By including these drivers twice, we can trace whether saving behavior is explained by the same drivers and in the same order of importance as extra spending is. Our approach combines objective and subjective indicators which, according to Uysal et al. (2016), lead to a better capture of the role of quality of life for tourists.

**Results**

First we check whether the samples in 2013 and 2015 are comparable in terms of sociodemographic composition. This is shown in the table in the appendix. All percentages in the two samples were tested with a \( t \) test and no differences were significant. As a consequence, we can compare the outcomes for the two samples.

**Research Question 1**

As was already briefly mentioned above, the Dutch economy went through a specific business cycle between 2008 and 2015. Figure 2 shows the percentage value change of GDP when compared with the same period in the previous year (CBS 2015a).

Figure 2 shows that between 2008 and the second quarter of 2015, the Dutch GDP followed a W-shaped pattern. The largest dip is in 2009, followed by a second dip in 2012–2013, while recovery sets in during 2014 and 2015.

However, in this article we take disposable income of a household as the key aspect referred to in the questionnaire. Figure 3 shows the development of this disposable income between 2008 and 2015 in quarterly periods as the percentage change in disposable income when compared with the same quarter of the previous year (CBS 2015b).

Figure 3 shows that the largest dip in disposable income occurred in late 2012 and early 2013, while the recovery clearly sets in after the beginning of 2014 and continues in 2015. This confirms the W-shaped nature of the business cycle between 2008 and 2015.

Based on Figures 2 and 3, we can conclude that the two measurement moments we employed in both studies fitted well in the actual stages of the business cycle, which makes asking about economizing decisions on expenditures in 2013 and asking about increasing expenditure decisions in 2015 meaningful for the respondents. This ensures that the questions asked had a high ecological validity, leading to answers that can be seen as representing real preferences.

**Research Question 2**

The data for the 2013 measurement about economizing priorities are published in the Journal of Travel Research.
In the second column of Table 2 are the percentages for the highest priority in terms of economizing, in the fourth column are the lowest priorities, and the third column contains the intermediate economizing priorities, which means that the product is not selected as a first or last economizing priority. Shown in the last column (balance score) is the difference between high economizing priority and low economizing priority (column 2 minus column 4). A high positive balance score means that a product has a low crisis resistance (a first candidate for economizing on) and a high negative balance score indicates a high crisis resistance (a last candidate for economizing on) of a product.

A similar table has been made for the 2015 measurement, see Table 3. In Table 3, a high positive balance score means that a product has a high expenditure priority and a negative balance score means that a product has a low expenditure priority.

Comparing Tables 2 and 3 is difficult as the balance scores are in opposite directions: for economizing on expenditures, a positive balance score has a negative influence on expenditures (=quickly economizing), while for increasing expenditures, a positive balance score has a positive influence on spending behavior (=quickly spending more). In order to improve the comprehensibility of these results, we rescaled the 2013 balance scores by changing the signs of the scores: “−” becomes “+” and vice versa. As these scales still have a different 0-point, we added to each rescaled balance score the most negative balance score. This implies that the product that fares worst in adversity (high economizing priority) or prosperity (low expenditure priority) receives a zero score. These rescaled values enable us to locate the products in the quadrants of the theoretical framework (Figure 1). The results are shown in Table 4.

Based on columns 3 and 4 in Table 4, the position of the goods on the two dimensions of the theoretical framework in Figure 1 can be determined. The averages of the balance scores in columns 3 and 4 were calculated and subsequently the balance scores in those columns were split into values below and above this average. In column 5 of Table 4, an H means that the product is classified as having an H = high economizing priority (above average) or an L = low economizing priority (below average). In column 6 of this table, a product is classified as having an H = high spending priority (above average) or an L = low spending priority (below average). Based on columns 5 and 6, we can assign the 13 products to the 4 quadrants of the theoretical framework (see Figure 4). As our product set represents a broad set of categories (for a description, see the Introduction section), we think that this classification is not dependent on the set of products included.

Figure 4 shows that there are products in the symmetry quadrant LL (symmetric constant) and the symmetry quadrant HH (symmetric mirror) as well as in the asymmetry quadrant LH (asymmetric positive) and the asymmetry quadrant HL (asymmetric negative). This confirms the assumption that for some products the effects of fluctuations in the business cycle differ. The three types of vacations, as instances of tourist demand, are located in two quadrants. The main summer holiday belongs to the “Winners” (LH, symmetric positive), with the profile that during a recession it is fairly crisis-resistant and during an expansion it experiences considerable growth. This confirms that the main summer holiday has an asymmetric positive pattern, which supports the finding by Smeral and Song (2015). This does not apply to the other two vacation types (short in-between vacations and day trips from home) as they are in the “Classic luxuries” (HH, symmetric mirror) quadrant, with the profile that during a recession they experience substantial reductions and during expansion comparable recovery growth. This is a symmetry

### Table 2. Economizing Priority for Different Products in Percentage of the Recession Period Sample 2013.

<table>
<thead>
<tr>
<th>Product Domain</th>
<th>High Economizing Priority</th>
<th>Intermediate Economizing Priority</th>
<th>Low Economizing Priority</th>
<th>Balance Score (High Minus Low)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theater</td>
<td>47</td>
<td>46</td>
<td>8</td>
<td>+39</td>
</tr>
<tr>
<td>Short in-between vacations</td>
<td>42</td>
<td>48</td>
<td>11</td>
<td>+31</td>
</tr>
<tr>
<td>Furniture</td>
<td>35</td>
<td>61</td>
<td>5</td>
<td>+30</td>
</tr>
<tr>
<td>Day trips away from home</td>
<td>35</td>
<td>55</td>
<td>10</td>
<td>+25</td>
</tr>
<tr>
<td>Magazines</td>
<td>30</td>
<td>66</td>
<td>5</td>
<td>+25</td>
</tr>
<tr>
<td>PC, tablets</td>
<td>15</td>
<td>76</td>
<td>9</td>
<td>+6</td>
</tr>
<tr>
<td>Mobile phone</td>
<td>11</td>
<td>78</td>
<td>12</td>
<td>–1</td>
</tr>
<tr>
<td>Main summer holiday</td>
<td>27</td>
<td>44</td>
<td>29</td>
<td>–2</td>
</tr>
<tr>
<td>Apparel</td>
<td>21</td>
<td>52</td>
<td>27</td>
<td>–6</td>
</tr>
<tr>
<td>Body care</td>
<td>5</td>
<td>66</td>
<td>29</td>
<td>–24</td>
</tr>
<tr>
<td>Transport, car</td>
<td>12</td>
<td>51</td>
<td>38</td>
<td>–26</td>
</tr>
<tr>
<td>Energy costs</td>
<td>7</td>
<td>51</td>
<td>43</td>
<td>–36</td>
</tr>
<tr>
<td>Daily shopping</td>
<td>15</td>
<td>19</td>
<td>66</td>
<td>–51</td>
</tr>
</tbody>
</table>

Source: Bronner and de Hoog (2016a, 198).

Note: Ordered in accordance with the highest priority for economizing in the Balance Score column (n = 5,454 for each row).
quadrant, so when talking about vacations in general one cannot say that they are symmetric or asymmetric. The type of vacation is decisive for having either a symmetric or asymmetric profile. Furthermore, all three types vacations are situated in the right hand quadrants which are the “positive” quadrants in Figure 1 and 4.

Concerning the other products, it is striking that daily shopping in the supermarket belongs in the “Winner” quadrant (LH in Figure 4) because in economics this product was always seen as a symmetric constant necessity (LL in Figure 4). An explanation for this position might be that cooking is a very frequent topic in TV programs and books about cooking abound, while cooking is also increasingly associated with health issues. The position of daily shopping in the “Winner” quadrant is also visible in the rise of the high-end and expensive supermarket chain Marqt in the Netherlands from 0 shops in 2008 (economic downturn) to 15 in 2015 (economic upturn). This chain focuses on natural and exclusive products.

Food probably has become important for the quality of life. The “Losers” quadrant (HL in Figure 4) shows on the one hand a product in a shrinking market (print media) and on the other hand, products suffering from market saturation (PCs and tablets).

Research Question 3

As was detailed in the Research design section, we included five drivers (well-being, loss aversion, physical health, family cohesion, sacrifice savings; see the operationalization of the specific questions asked for these drivers) that could influence expenditure priorities for holidays. In order to
In order to determine the role of the quality of life, we carried out a factor analysis on the five drivers to see if they are also a single factor in time of economic growth. Again, like in the 2013 data, the five drivers form a single factor (explaining 66% of the variance with a Cronbach’s α = .87) that can be described as measuring the contribution of a holiday to a person’s QOL. We took the respondent’s factor scores on this factor and categorized them into three equal groups. The highest factor scores are seen as indicating that holidays make a high contribution to QOL. To investigate research question 3, a set of regression analyses is carried out, with the spending priority relating to the three types of holiday. We will differ for higher and lower income categories, but their expenditure priorities are similar. For the other two types of vacation the role of QOL is less important and other variables like age and household income become more important. This is explainable and in line with the fact that these two types of holiday belong among the classic luxuries in Figure 4, where expenses vary with ups and downs in the business cycle. As they do contribute less to the vacationer’s QOL, giving them up entails less loss in terms of QOL, and loss aversion will become less important. Finally, it should be noted that vacations belong in the two quadrants in Figure 4 which entail no loss across the business cycle: either they gain or stay the same in terms of priority of expenditure patterns.

Summary and Conclusions

Summary

The summary is linked to the research questions.

Research question 1. The profile of the business cycle shows a W-shape, with two periods where the bottom was hit: in 2009 and 2012–2013, while a recovery sets in during 2014–2015. We carried out the first measurement in April 2013, a period of recession, and the second measurement in April 2015, a period of recovery. This ensures that the data regarding economizing and expenditure priorities are collected in a period that aligns with the actual economic situation, leading to a high ecological validity of the study.

Research question 2. Taking the economic contraction period and the economic expansion period as starting points, we constructed a theoretical framework that allows the positioning of different goods in terms of two dimensions (expenditure priority and economizing priority) that can accommodate symmetries and asymmetries across the business cycle. Based on these two dimensions, two dichotomizations lead to four quadrants. These quadrants are characterized by a profile. The quadrants L(ow)L(ow) and H(igh)H(igh) are the symmetric quadrants: the changes in the demand for a product in times of prosperity and adversity are constant or mirror images of each other. Quadrant LL hosts the classic necessities that are fairly immune to changes in the business cycle: spending on them will stay more or less the same. Situated in quadrant HH are products that are highly sensitive to changes in the business cycle: spending will go down substantially during the contraction period but will increase by the same
amount during the expansion period. The other two quadrants are asymmetric. The asymmetric negative quadrant H(high)L(low) contains products that suffer during an economic downturn and cannot recover this loss during an economic upturn. The other asymmetric positive quadrant L(low)H(high) has the opposite profile: economizing is limited during adversity but recovery is substantial during prosperity.

The results show that there are products in the symmetry quadrants (LL and HH) as well as in the asymmetry quadrants (LH and HL). This confirms the assumption that for some products the effects of fluctuations in the business cycle differ. The three types of vacations, as instances of tourist demand, are located in two quadrants. The main summer holiday belongs in the “Winners” (quadrant LH), with the profile that during a recession it is fairly crisis-resistant, and during an expansion it experiences considerable growth. This confirms that the main summer holiday has an asymmetric positive pattern and this supports the finding by Smeral and Song (2015). This does not apply to the other two vacation types (short in-between vacations and day trips from home) as they are in the symmetric mirror quadrant (HH), with the profile that during a recession they experience substantial reductions and during expansion comparable recovery growth. This is a symmetry quadrant, so when talking about vacations in general one cannot say that demand reactions of vacationers are symmetric or asymmetric.

Concerning the other products, it is striking that daily shopping in the supermarket belongs in the “Winner” quadrant (LH), because in economics this product was always seen as a necessity (LL). An explanation for this position might be that cooking is a very frequent topic in TV programs and books about cooking abound, while cooking is also increasingly associated with health issues, which is evidenced by an emerging market of supermarkets paying attention to healthy food. Food probably has become important for the quality of life. The “Losers” quadrant (HL) shows on the one hand a product in a shrinking market (print media), and on the other hand products suffering from market saturation (PCs and tablets).

Research question 3. In the literature, the role of a holiday for QOL has been emphasized (Uysal, Perdue, and Sirgy 2012; Uysal et al. 2016). Also, our research shows that the role of QOL is important during adversity and prosperity as it explains considerable variance in addition to sociodemographics, in particular as regards the main summer holiday. For the other two types of holiday, the role of QOL is less important and other variables like age and household income become more important. This is explainable and in line with the fact that these two types of holiday belong among the classic luxuries, where expenses vary with ups and downs in the business cycle. As they do contribute less to the vacationer’s QOL, giving them up entails less loss in QOL and loss aversion will become less important. Finally, it should be noted that vacations belong in two quadrants in the theoretical framework that entail no losses across the business cycle: either they gain or they stay the same in terms of priority of expenditure patterns.

Conclusion

The conclusion is linked to the main research question.

Is the tourist demand for vacations during changes in the business cycle symmetric or asymmetric and which factors can explain this symmetric or asymmetric demand?

The answer to the main research question is that expenditures on the different holidays (main summer holiday, day trips from home, in-between vacations) do not show the

<table>
<thead>
<tr>
<th>Type of Holiday</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Socdem during Adversity</td>
<td>Socdem + QOL during Adversity</td>
<td>Socdem during Prosperity</td>
<td>Socdem + QOL during Prosperity</td>
</tr>
<tr>
<td>Main summer holiday</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( R )</td>
<td>.16</td>
<td>.40</td>
<td>.10</td>
<td>.28</td>
</tr>
<tr>
<td>Adjusted ( R^2 )</td>
<td>.03</td>
<td>.16</td>
<td>.01</td>
<td>.07</td>
</tr>
<tr>
<td>( \beta ) QOL</td>
<td>n.a.</td>
<td>.37</td>
<td>n.a.</td>
<td>.26</td>
</tr>
<tr>
<td>Short in-between vacations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( R )</td>
<td>.10</td>
<td>.19</td>
<td>.19</td>
<td>.26</td>
</tr>
<tr>
<td>Adjusted ( R^2 )</td>
<td>.01</td>
<td>.03</td>
<td>.03</td>
<td>.06</td>
</tr>
<tr>
<td>( \beta ) QOL</td>
<td>n.a.</td>
<td>.17</td>
<td>n.a.</td>
<td>.18</td>
</tr>
<tr>
<td>Day trips away from home</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( R )</td>
<td>.03</td>
<td>.05</td>
<td>.14</td>
<td>.17</td>
</tr>
<tr>
<td>Adjusted ( R^2 )</td>
<td>.00</td>
<td>.00</td>
<td>.02</td>
<td>.02</td>
</tr>
<tr>
<td>( \beta ) QOL</td>
<td>n.a.</td>
<td>n.s.</td>
<td>n.a.</td>
<td>.10</td>
</tr>
</tbody>
</table>

Note: n.a. = not applicable.
same pattern across the business cycle. The main summer holiday has an asymmetric expenditure pattern across a period covering adversity and prosperity. The other two vacations show a symmetric expenditure pattern across both phases of the business cycle and can be seen as classic luxuries. These differences can be explained in terms of the contribution of a holiday to the vacationer’s QOL being more important as regards the main holiday, leading to loss aversion and limited economizing during adversity.

**Implications**

**Theoretical Implications**

The first theoretical implication concerns the symmetry or asymmetry question. Our research shows that the conclusion by Smeral and Song (2015)—that asymmetric consumer spending behavior occurs—is confirmed, but only as regards the main summer holiday. This asymmetry is located in the asymmetric positive quadrant with the profile that during a period of economic contraction the main summer holiday is fairly crisis-resistant, while during expansion it shows considerable growth that is larger than the very limited loss during a recession. For the other vacation types, the spending behavior is symmetric mirror: a substantial loss during a recession and comparable growth in the recovery period. As a consequence, when dealing with spending patterns, different types of holidays should be discerned, which makes the use of aggregated tourism data (like hotel bookings) an approach that must be exercised with care, because they cannot make a difference between types of holidays. Lumping hotel bookings together could lead to misleading results as they can cancel each other when aggregated.

A second theoretical implication is related to the finding that the drivers of spending behavior on a summer holiday and, to a lesser extent, the day trip away from home and the short in-between vacation are similar across phases of the business cycle. QOL plays an important role during adversity as well as prosperity, though far more as regards the main summer holiday than for the other two vacations. This could be labeled as a form of driver symmetry. Furthermore, sociodemographic variables (age, income, and household size) do not have a significant relationship with expenditure priorities for the main summer holiday. As a consequence, our conclusion about the main summer holiday is that expenditure priorities do not depend on sociodemographic segments, although expenditure levels will differ.

**Managerial Implications**

The main input for implications is derived from the finding that the three types of holidays have different demand reaction patterns across the business cycle in a given period, leading to different consequences for marketing and advertising in the tourism industry. Campos-Soria, Inchausti-Sintes, and...
Cell 2: greatly stress the contribution of the holiday to the individual’s QOL in transformational messages, using terms like happiness, relaxation, reunion of the family, unique and unforgettable experiences. Aim at a customer-intimate brand relationship.

Cell 3: use informational messages to get business going again, gradually introducing transformational messages. Branding becomes gradually more important. Also, QOL can be introduced, for example: a city trip to escape briefly from the hustle and bustle of daily life.

Cell 4: no major changes in the strategy: keep on going and try to become more customer-intimate.

In addition, one could try to transform day-trips from home and short in-between vacations into “Winners” (see Figure 1), by stressing their contribution to the QOL and the loss one experiences when one does not participate in these types of holidays. Also Sirgy (2010, 255) suggests “to maximize tourist satisfaction in ways that contribute to life satisfaction.”

A completely different angle is provided by using the notion of “brand-transcending marketing” for the entire tourism industry. This entails comparisons across very different product categories, which can be used for trying to move a product between the quadrants of the theoretical framework, for example, a move from the classic luxuries to the winners in Figure 1. Recently, in the Netherlands, the DIY store chain Gamma compared going on holiday with redecorating your home. The message in this advertisement is that redecorating your house improves your QOL in the same way as a holiday does. This is an example that tries to move DIY products to the Winner category. For day-trips from home and short in-between vacations, this could lead to a comparison with products already in the Winner category: apparel, for example.

Limitations and Future Research

Limitations

A limitation of the study described in this article is related to two aspects: (1) use of microeconomic indicators alone and no use of macro-data and (2) attention only on the demand side and not on the supply side. However, there are macro-data available for the Netherlands that show that expenditures on several goods included in the study (food, durables, vacations) behave in the same way as shown by the micro-data across the business cycle between 2007 and 2014 (Bronner and de Hoog 2016b). Concerning the supply side, we did not collect data about changes and adaptations in the travel brochures aimed at meeting fluctuations in the business cycle (e.g., new destinations, cheaper accommodations). The problem with this type of data is that it is difficult to ascribe changes in the supply to changes in the business cycle. For example, the increased risk of terrorist attacks (see, e.g., Egypt and Tunisia) leads to a substitution of destinations offered that have properties that are comparable to the avoided destination (beach and sun holiday).

Future Research

We collected data during the start of the recovery, but it would be interesting to see how the product categories behave during a longer-lasting and stable period of prosperity. Our recession data cover a period of seven years, but our recovery data cover a period of about a year.

Finally, the combination of micro-data (individual attitudes and behavior measured in a survey) with macro-data (collected by official statistical agencies) can be used to broaden our understanding of the effect of fluctuations on tourist demand across the business cycle (see, e.g., the study by Campos-Soria, Inchausti-Sintes, and Eugenio-Martin 2015).

Appendix. Comparison between Samples in 2013 and 2015 as Regards Sociodemographic Variables.

<table>
<thead>
<tr>
<th>Sociodemographic Variable</th>
<th>Sample of Vacationers, 2013 ((n = 5,901)), %</th>
<th>Sample of Vacationers, 2015 ((n = 966)), %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>49</td>
<td>48</td>
</tr>
<tr>
<td>Female</td>
<td>51</td>
<td>52</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18–24</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>25–34</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>35–44</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>45–54</td>
<td>21</td>
<td>20</td>
</tr>
<tr>
<td>55–64</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td>65+</td>
<td>21</td>
<td>25</td>
</tr>
<tr>
<td>Social class</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A (highest)</td>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td>B+ (medium/high)</td>
<td>32</td>
<td>33</td>
</tr>
<tr>
<td>B– (medium/low)</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>CD (lowest)</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Family composition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>2 persons</td>
<td>47</td>
<td>51</td>
</tr>
<tr>
<td>3 persons</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>4 persons</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>5+</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

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**Author Biographies**

**Fred Bronner** is a professor emeritus at the University of Amsterdam. His main research interests are cross media research, advertising effects and electronic word-of-mouth and vacation decision processes.

**Robert de Hoog** is a professor emeritus at the University of Twente. His main research interests are knowledge management, tutoring systems and vacation decision processes.