

Channel Choice Behaviour for Different Usage Situations: The Case of the Wine Product Category

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Abstract

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Consumers are faced with a growing number of channels in which to purchase products and services. Most of the research in multi-channel retailing has focused on the retailer's perspective of multi-channel management and little has focused on consumer choice of channels. A small amount of research in consumer product choice has shown that the usage situation affects the importance of product attributes and the choice of products. This paper is one of the first to examine consumer channel choice for different product usage situations. A survey of 197 Belgian wine buyers explores previous and future channel choice for wine purchases across six usage situations. A logit model is developed for each usage situation and the parameters are compared for both channel users and non-users across usage situations. Supermarkets are the most widely used for all situations but the importance of the key attributes of price, channel quality, convenience, and risk differed across the channels and situations. Loyalty or previous usage was also a major determinant of channel choice. Non-users were characterized by higher perceived risk for each channel, but also showed differences in price and quality perceptions for different situations.

Keywords: Channel choice; situation; wine purchase behaviour

Introduction

Consumer wine choice is a complex process, which has been studied for the last 15 years with increasing scrutiny (see Lockshin and Hall, 2003 for a review; and Lockshin et al., 2006). However, little attention has been paid to how consumers choose the channel or outlet where they go to purchase wine. At the same time the idea of multi-channel retailing has received more attention in the marketing literature (Baiden, 2000; Scott, 2001; Nicholson, Clarke & Blakemore, 2002; Reardon & McCorkle, 2002; Sonneck & Ott, 2006). Technological advances, especially the Internet, have forced retailers to develop different channels, which often compete with each other (Baiden, 2000). Much of the literature has focused on how retailers should develop their multi-channel strategies in order to reduce inter-channel cannibalisation and competition, but little work has focused on how the consumer views and chooses the channel to buy their product or service.

Another issue, which has not received much attention, is how the consumption situation affects product (wine) choice. There have been a few articles focusing on situational effects in product choice (Sandell, 1968; Rao, 1972; Belk, 1974a and b; Srivastara, Shocker & Day, 1978; Dickson, 1982), but only two in wine (Dubow, 1992; Hall & Lockshin, 2000). All of these articles point to some interaction of product choice and situation. We might expect a similar interaction of channel choice and usage situation.

This paper addresses the issue of channel choice for wine in different usage situations. First we review the literature on consumer choice of channel with some reference to recent studies on multi-channel retailing. We discuss the issues facing wine consumers with the availability of different channels and review the relatively few articles on situational effects on consumption. We then provide the design of the data collection and analytical methods followed by a comparison of the factors influencing channel choice for different wine consumption situations. We conclude with some implications for further research in this area and some recommendations for different retailers looking to incorporate situational factors into their retail offer.

Research Background and Objectives

The past decade has been characterized by substantive changes in channels of distribution for goods and services in developed economies. The number of potential channels has increased. Besides traditional channels, direct ordering with the Internet, catalogues, mail, telephone, TV and even digital TV is claiming its part of the market. The dominant model for the distribution of consumer goods used to be a single channel model with different types of goods requiring different types of channels. Today this is not true anymore. The same goods are sold through different kinds of channels. One can see multi-channel issues from three perspectives: the manufacturer, the retailer and the consumer perspective. A great interest in the literature until now has been the understanding and analysis of channel management and channel design. Because multi-channel is becoming the standard in a many industries, the main issue that has been investigated is whether companies (i.e., manufacturers and retailers) should either stick to their single channel strategy or sell their products through multiple channels. If they stick to their traditional channel, they might become obsolete and left behind by their competitors. On the other hand, it is not guaranteed that an extra channel will attract new customers; it might just cannibalize sales from the existing channel(s). There is in addition a huge investment to implement a multi-channel strategy as it requires to acquire

knowledge rapidly about the new channel and the underlying market. Multi-channel companies have to expect early losses but they could be successful in the long term. Various studies have tried to determine key success factors for the implementation of multi-channel strategies. For instance, Baiden (2000) suggests five key actions to succeed in a multi-channel environment: promote the brand, know the customer, target advertising, integrate fulfilment and watch costs. Despite these difficulties, many companies are already or are thinking of becoming multi-channel companies, especially going to the Internet, as the pressure for an on-line presence is becoming stronger everyday. The manufacturer and the retailer perspective with respect to multi-channel research issues has thus been the focus, rather than the consumer perspective and very few authors have investigated consumer's multi-channel shopping behaviour. Multi-channel shopping has however become the norm for many consumers today. The multi-channel system changes the concept of loyalty as consumers tend to patronize not only points of sales within a given channel but also across channels. Different circumstances, lifestyles and shopping needs push the shopper to choose one channel ahead of another (Scott, 2001; Nicholson, Clarke & Blakemore, 2002), but as store loyalty is not exclusive neither is channel loyalty. A very few studies have investigated multi-channel issues from a consumer perspective. The next section proposes a brief overview of these studies.

Consumers' channel choice behaviour

Reardon & McCorkle (2002) extended Becker's (1965) time allocation model to explain and predict consumers' choice of distribution channel based on household time availability, resource availability, the implication of psychic costs/benefits, and capital constraints. They concluded that consumers choose a channel by maximizing their utility for the minimum input of their resources. They highlight three major managerial implications of their research: a consumer's channel switching behaviour (i) is influenced by tradeoffs, the main tradeoffs being between time and money and between time and psychic income or pleasure; (ii) is influenced by perceived risk (e.g., financial risk, performance, social risk, time-loss) which is greater for channels operating from a distance; (iii) can be addressed through the use of multi-channel strategies. Because consumers are likely to vary their shopping behaviour by channel, the retailer with the greatest channel choice available will have the greatest success.

From their qualitative study, Schoenbachler & Gordon (2002) suggest five key factors that influence the likelihood that a customer will purchase from a particular channel (i.e., brick-and-mortar, online, catalogue) or from multiple channels: (i) the perceived risk associated with the purchase which can be financial, social or physical or some combination; (ii) the past direct marketing experience which refers to when and how the consumer has purchased in the past; (iii) the motivation to buy from a channel which is influenced by the customer's demographic profile (age, education, income, occupation, household size) and his lifestyle (need for convenience, heavy or light shopper, views on shopping for entertainment); (iv) the product/service category as some products are better suited to be sold through an online channel whereas other products are more often purchased via traditional retail outlets; (v) the website design, which includes its eye appeal, ease of use, ease of purchase process, and product layout.

Black et al. (2002) qualitatively investigated the consumer's choice of distribution channel in the context of financial services. From their focus groups, they found five factors that appear to

influence the choice of channel in the financial business. Consumers' characteristics such as their confidence in their ability to use a particular channel or the perceived complexity of the channel usage, socio-economic, age and lifestyle characteristics (time pressure, convenience, etc.) play an important role. The product of interest appears to be a key influencing factor in the selection of the channel. Products can be categorized according to their complexity, their price and their perceived risks. Low involvement products seem to be well suited to technology-based channels, whereas more complex products fit better in face-to-face channels. In addition, a face-to-face channel is preferred for a product with a higher perceived risk or a more expensive product. Channel attributes such as the product assortment, the quality of the service, the channel accessibility (location, convenience, trading hours, etc.), the channel cost (connection time for the Internet) and the channel risk which varies according to the familiarity and the experience with the channel are logically influential as well. Finally, the fifth factor concerns the organization itself. It covers its reputation (or its brand, image, size and longevity) and the range of channels that it makes available to its customers. Black et al. (2002) indicated that these factors are likely to interact. For instance, for simpler products (i.e., low complexity or associated risk), consumers consider more channels as a viable option, whereas the contrary holds for more complex or riskier products. Consumer-channel interactions may also be significant. A consumer can be more confident in using a particular channel or can have an affective response regarding a particular channel. Though insightful, the nature of this qualitative research is exploratory and one wonders whether these results apply to products or services other than financial services.

Gehrt and Yan (2004) investigated how consumer characteristics, retailer's attributes and situational factors impact on the performance of three retail formats, that is brick-and-mortar stores, online stores and catalogues. The participants in their survey rated a variety of retail attributes and the appropriateness of these retail formats in the context of eight situational scenarios. Four retail attributes were studied: the transaction service (e.g. easy to place an order, different payment possibilities), the merchandise (easy to find merchandise, the quality of the merchandise, etc.), the retailer personality (shopping atmosphere, well known national brands, etc.) and the price (low prices, ease of price comparison). The eight situational scenarios were combinations of three two-level situational factors that are likely to affect the shopping behaviour: time availability (under time pressure or not), the shopping task (for a gift or for oneself) and the product category (books as search goods and clothing as experience goods). They showed that the importance of retailers' attributes (except for the price factor) is influenced by situational factors. There are strong relationships between situational factors and consumers' selection of a retail format. The importance of retailers' attributes affects retail format preferences. Except income, they did not find any other significant relationship between the retailers' attribute importance and demographics. Their assumption that retail format preferences vary across individual demographics is thus only partially supported. As expected, they found that individuals' Internet usage behaviour affects the attributes' importance as well as the retail format selection.

In the context of financial services, Boehm and Gensler (2006) investigated the impact of customers' channel attribute perceptions (i.e., quality, convenience, risk, and price) and channel experience on their usage of four channels (i.e., branches, call centres, Internet and banking terminals) in three stages of the purchasing process, that is the information search stage, the purchase stage and the transaction stage. They showed that past experience with the channel or loyalty was an important driver of subsequent channel choices. They also found a positive carry

over effect from the information to the purchase stage. The weights of channel attributes on channel usage vary across customer segments (based on unobserved characteristics) and across purchase stages. The stages of the purchase process have thus a moderating effect on channel choice.

To summarize, the value of a channel appears to be mainly characterized by four dimensions: (i) the quality of the channel in terms of services, staff and assortment, (ii) the convenience offered by the channel, (iii) the risk involved in conducting transactions through the channel and (iv) the costs of conducting business through the channel. In some of the papers, a fifth factor emerges, namely consumers' attitude towards the channel. However the definition of the attitude towards the channels varies across studies. Schoenbachler and Gordon (2002) talked about the customers' past marketing experience, which in fact forms one's attitude towards a channel. Black et al. (2002) described 'attitude' as the organization's reputation whereas Gehrt and Yan (2004) defined attitude as the retailer's personality, which in turn influences the customer's attitude towards the channel.

Channel choice and situational factors

If consumers' channel choice behaviour appears to be partly driven by the channels' attributes as well as by their own characteristics, situational factors have also been shown to play an important role. Black et al. (2002) suggested that a consumer is suspected to choose a channel as a function of what s/he is looking for; they named it 'motivation'. As such, a consumer might search for social interaction during shopping time or s/he might be ready to sacrifice things just to save time or to have more control. Situational influences are complex, partly because the meaning of a situational factor varies from a study to another. For instance, Gehrt and Yan (2002) considered situational scenarios as a combination of time availability, the product to be purchased and the purchase motivation. Boehm and Gensler (2006) viewed situation as the stages of the purchasing process. We prefer to use situation as marketers have in research, starting with Belk (1974a,b). Here situation is the consumption or usage situation, not the shopping situation. Many products can be used in different situations, such as for personal use or for a gift. Situational influences have a theoretical foundation in Lewin's field theory (1936) and the modern interactionism conception of human behaviour. A fairly limited number of researchers have investigated situational factors as a determinant of product choice behaviour and none that we are aware of have applied this to channel choice. Sandell (1968) presented subjects with an inventory of beverages and found that personal differences and differences in situations, considered separately, were poor predictors of product preference. The interaction of product and situation, however, provided a better predictor of beverage preference. Green and Rao (1972), Belk (1974a,b), and Srivastava, Shocker, and Day (1978) all found the same type of interaction between product choice and usage situation. In a later study, Srivastava (1980) examined the appropriateness of financial services in different situations and found it to be relatively stable, thus providing further support for using consumption situations as a basis for segmenting the market. Dickson (1982) combined these previous studies into a call for more research after creating a person/situation segmentation model, but without empirical results. Dubow (1992) compared occasion-based and user-based segmentation for the wine market in the US and concluded that the occasion-based segmentation was richer and more relevant for brand positioning and advertising strategy. Hall and Lockshin (2000) used means-end analysis to show that the attributes, consequences and values inherent in different wine consumption situations differed.

It is evident that there is merit in including product characteristics, consumer characteristics and specific situations in a combined analysis. Although there has been some research into consumption situations and product choice, there has not been any research into usage situation and channel choice. The above review indicates that adding situations to either product and/or consumer characteristics may improve the predictive nature of segmentation and clustering and the same may be true combining situation and channel choice.

The wine market offers a useful category to test situation and channel choice interactions. Although wine is a single category, it can be used across a number of different situations, such as personal consumption, as a gift, for a special dinner, for a party, or even to age and drink later. As such it provides a rich range of situational variables. At the same time wine is available through a range of channels. It is typically bought at grocery stores, but there are specialised wine stores and more and more wine is being offered direct through catalogues or the Internet. There are even wine fairs, where producers and their agents rent a temporary selling space and offer wines to be tasted and then purchased. The wine category provides a varied set of channels and usage situations to conduct exploratory research on the effect of usage situations on channel choice.

Objectives of the study

Given the literature review above, we focus on conducting an exploratory study of channel choice for different wine usage occasions. Through the literature (Hall & Lockshin, 2000) and interviews conducted for this study, six usage situations and four channels were chosen to represent a wide range of combinations. Our objective is to follow the recent research by Boehm and Gensler (2006) in focusing on four channel attributes: price, quality, convenience, and risk. We add as well previous behaviour (loyalty) and the standard consumer demographic measures plus product (wine) involvement (Lockshin et al., 1997). Our overall goal is to be able to model consumer's channel choice for different usage situations as a combination of the above-mentioned variables. We now turn to the design and methodology of the research.

Methodology

Data collection

Given that the objective of this study is not to estimate some population characteristics but rather to study consumers' channel choice behaviour for given purchase situations, our sampling methodology was designed to obtain a sufficient number of observations for the channels and the purchase situations under study. In order to obtain a broad sample of wine purchasers, we thus conducted our surveys in various locations using various modes. We conducted the survey in three very different Belgian cities: Brussels, Knokke (a Flemish city) and Namur (a Walloon city). We surveyed 204 persons from which we were able to retain 197 valid questionnaires. Most respondents were intercepted at the entrance of several grocery retailers and specialized wine stores and interviewed face-to-face. Internet wine purchasers were first contacted by email using some wine-selling websites' client lists and subsequently surveyed. To summarize: 150 respondents (or 76% of the sample) were intercepted at supermarkets, 34 (or 17%) at the exit of

specialized wine stores and 13 persons (or 7%) answered the survey by e-mail. On average, the refusal rate was around 43%.

Survey items

Respondents were surveyed on their perceptions about channel attributes, their wine shopping experience as a whole as well as for selected purchase situations, their channel choice intentions for the selected purchase situations and finally their demographics and some other characteristics.

In this research we focused on the three most patronized channels: supermarkets/ hypermarkets, specialty stores, wine fairs (large temporary shops where consumers can taste and buy wines from the producer or agent); and to the emerging direct sales channel of Internet and catalogues. Respondents were asked to rate each of these four channels on 18 different items with 5-point Likert agreement scales (from 'totally disagree' to 'totally agree'). From the literature on channel/store choice (Black et al., 2002; Gehrt & Yan, 2004; Boehm & Gensler, 2006) as well as from the literature on wine and wine store choice (Lockshin & Kahrmanis, 1998; Lockshin et al., 2006), we selected a set of items to measure consumers' perceptions of channel attributes such as price, salesperson and service quality, assortment, risk, convenience, and atmosphere. Two items also concerned their overall attitude towards each of the channels. We factor-analyzed the items and undertook the usual scale internal consistency analyses using Cronbach's alpha. As suggested by former studies discussed in the previous section, four broad dimensions were found to characterize the channels: channel quality (5 items) including the service, the assortment, the salespersons' competence and the layout quality; the risk associated with buying through the channel (4 items); channel price, low to high (1 item); convenience defined by the ease of making transactions through the channel (1 item). The attitude towards to the channel (2 items) loaded on a fifth dimension. The solution we obtained is the best solution for the four channels we investigated in the sense that single-dimensionality as well as internal consistency (α 's close to or higher than 0.6) achieved the requirements for the same set of items across the four channels. The detailed factor matrix is available from the authors.

Besides channel perceptions, respondents were asked about their shopping experience and wine consumption habits in terms of channels patronized, channel satisfaction, purchase and consumption frequency, total spending for wine and spending across channels. Consumers were also questioned about their purchase habits regarding the different situations for which they could buy wine. Given the literature on wine consumption and given the results we obtained from focus groups as well as in-depth interviews, in this paper we restrict ourselves to the following six wine purchase situations: for a gift, for regular consumption at home, for an intimate dinner, for an elaborate dinner, for aging and for a party. Respondents first indicated whether they had already bought wine for each of the occasions and then their most recent channel where they purchased wine, and to what extent they were satisfied with their experience. We next elicited consumers' channel choice intentions for wine purchase for each of the six analyzed occasions. We used a constant sum scale to measure intentions, i.e. we asked respondents to share out 100 points between the four channels under study. This approach has previously been used in the channel choice literature to measure channel usage (Boehm & Gensler, 2006). The last part of the questionnaire measured consumers' characteristics.

Respondents were asked about typical demographics (age, gender, education, occupation, household size), their usage and shopping habits regarding the Internet and catalogues, their possession of a wine cellar, the number of wine drinkers in their household and their involvement and expertise with respect to wine. To measure the latter two constructs, we use Lockshin et al.'s (1997) involvement scale (3 items; $\alpha \cong 0.77$) and Perrouy et al.'s (2006) self-assessed expertise scale (4 items; $\alpha \cong 0.79$).

Sample descriptive statistics

Table 1 presents some selected summary statistics about our sample. From part (a) of Table 1, we see that 97% and 71% of the respondents have already bought wine from supermarkets and specialty stores, respectively. As expected, fewer people have purchased wine at wine fairs and from the Internet and catalogue wine retailers (21% for each). Part (b) shows the average perceptions or ratings of the four channel attributes, the average attitude towards the channel as well as the results of pairwise *t*-tests for mean differences. Briefly, it appears that supermarkets are perceived as the least expensive and the most convenient channel, whereas specialty stores are perceived as the most expensive but the highest quality as well as the lowest risk channel. Wine fairs are perceived as the least convenient channel and Internet/catalogues as the most risky channel. Regarding positive attitude toward the channel, speciality stores appear to be the most favoured, followed by supermarkets and wine fairs. The Internet appears across all respondents as the least favoured channel. Finally, from part (c), we see that purchase situations are well represented in the sample with a high of 95% of respondents who have already made a wine purchase for an elaborate dinner to a low of 69% for a party. Purchase intentions vary to some extent from situation to situation with a predominance of supermarkets and specialty stores. Channel choice intentions appear to be fairly linked with the last channel choice for each situation.

Modelling channel choice behaviour

We used the standard logit specification to model the channel choice probability. We conditioned this probability on purchase situation. In other words, we estimate a different set of parameters for each situation and subsequently compare model estimates across situations. Since the estimates are from the same people using the same items for each situation, comparison between situations is possible. We modelled the channel choice probability for a given situation as a function of channel attribute perceptions, channel usage (i.e., penetration) and channel loyalty (i.e., the last channel choice). Given we considered 4 channels, we added 3 channel constants, that have to be interpreted as differences in intrinsic preferences (or variations in the dependent variable not accounted for by the explanatory variables) with the reference channel, that is supermarkets. In order to better account for channel usage or experience, we split the sample into consumers who have already experienced the channel, independently from the situations, and consumers who have never bought through this channel. We thus estimated a separate set of parameters for channel attribute perceptions for non-users. We expect the estimated weights for the channel attributes not only to vary across purchase situations but also across these two segments.

Table 1. Descriptive Statistics

(a) Channel usage (penetration rates) for wine purchases (N=197)					
	Supermarkets	Specialty stores	Wine Fairs	Internet & Catalogues	
# respondents who bought wine through the channel	192	140	42	42	
	97%	71%	21%	21%	

(b) Consumers' evaluations of channel characteristics and attitude towards the channels					
	Price	Quality	Convenience	Risk	Attitude
Supermarkets	2.32 c	3.48 b	4.13 a	2.98 b	3.28 b
Specialty stores	3.58 a	3.84 a	3.12 c	2.32 c	3.57 a
Wine Fairs	2.79 b	3.25 c	2.79 d	2.93 b	3.18 b
Internet & Catalogues	2.84 b	2.95 d	3.39 b	3.48 a	2.49 c

Note: a>b>c at $p<.05$ (pairwise student *t*-test for mean differences)

(c) Statistics on purchase situations						
<i>Purchase situations</i>	<i>Gift</i>	<i>Personal consumption</i>	<i>Intimate dinner</i>	<i>Elaborate dinner</i>	<i>Wine to age</i>	<i>Party</i>
<i>Channel choice intentions</i>						
Supermarkets	45.8	71.6	75.0	43.5	36.0	57.0
Specialty stores	47.2	18.5	18.6	47.0	47.2	33.6
Wine Fairs	3.7	4.9	2.2	5.3	10.8	4.5
Internet & Catalogues	3.3	5.0	4.2	4.2	6.0	4.9
<i>Situation penetration rates</i>						
# respondents who experienced the situation	177	180	188	149	139	135
	90%	91%	95%	76%	71%	69%
<i>Last channel choice</i>						
Supermarkets	85	136	136	60	45	76
	48%	76%	72%	40%	32%	56%
Specialty stores	75	32	43	64	61	44
	42%	18%	23%	43%	44%	33%
Wine Fairs	7	9	2	10	20	3
	4%	5%	1%	7%	14%	2%
Internet & Catalogues	12	11	15	12	18	7
	7%	6%	8%	8%	13%	5%

Finally, we incorporate a loyalty variable for channel users as a last channel choice for a particular situation. More formally, consumer's n ($n=1, \dots, N$) probability of choosing a particular channel c ($c=1, \dots, C$) for a purchase situation s ($s=1, \dots, S$) is given by

$$P_{n,c}^s = \frac{\exp(V_{n,c}^s)}{\sum_{c=1}^C \exp(V_{n,c}^s)}$$

with

$$\begin{aligned}
 V_{n,c}^s &= \beta_c^s + User_{n,c} \\
 &\times \left(\beta_{price}^{s,u} \times Price_{n,c} + \beta_{qual}^{s,u} \times Quality_{n,c} + \beta_{conv}^{s,u} \times Conv_{n,c} + \beta_{risk}^{s,u} \times Risk_{n,c} + \right. \\
 &\quad \left. + \beta_{loy}^{s,u} \times Loyalty_{n,c}^s \right) \\
 &+ (1 - User_{n,c}) \\
 &\times \left(\beta_{price}^{s,nu} \times Price_{n,c} + \beta_{qual}^{s,nu} \times Quality_{n,c} + \beta_{conv}^{s,nu} \times Conv_{n,c} + \beta_{risk}^{s,nu} \times Risk_{n,c} \right)
 \end{aligned}$$

where

- $V_{n,c}^s$: deterministic part of the utility consumer n associates with channel c for purchase situation s ,
- β_c^s : constant estimate for channel c within purchase situation s ,
- $\beta_{price}^{s,u}, \beta_{qual}^{s,u}, \beta_{conv}^{s,u}, \beta_{risk}^{s,u}$: parameters respectively for the price, quality, convenience and risk channel attributes for channel users (u) within purchase situation s ,
- $\beta_{price}^{s,nu}, \beta_{qual}^{s,nu}, \beta_{conv}^{s,nu}, \beta_{risk}^{s,nu}$: parameters respectively for the price, quality, convenience and risk channel attributes for channel non users (nu) within purchase situation s ,
- β_{loy}^u : parameter for last channel choice variable for users only within purchase situation s ,
- $User_{n,c}$: dummy variable which equals 1 if consumer n has already bought wine from channel c ,
- $Price_{n,c}, Quality_{n,c}, Conv_{n,c}, Risk_{n,c}$: channel c attribute perceptions by consumer n ,
- $Loyalty_{n,c}^s$: dummy variable which equals 1 if consumer n bought wine from channel c the last time s/he purchased wine within situation s ,

The dependent variable we used is the channel choice intentions for each purchase situation. The constant sum scale values are thus used as indicator variables in the likelihood function. More formally, the log-likelihood function to be maximized for a given purchase situation s takes the following form

$$L^s = \ln l^s = \sum_{n=1}^N \sum_{c=1}^C y_{n,c}^s \ln P_{n,c}^s,$$

where $y_{n,c}^s$ is indicator variable indicating consumer n intentions (from 0 to 100) to purchase next from channel c for purchase situation s . We thus do not consider individual choices but rather a type of aggregate choices. This approach is fairly similar to repeated choice data when the explanatory variables do not vary across purchase occasions. Using individual choices or using aggregate choices leads to the same coefficient estimates (Ben-Akiva & Lerman, 1985, p. 120). The only possibility of change is the weight of each individual in the final estimation. However, since we used a constant sum scale, all households have the same weight (i.e., 100) in the likelihood function. This approach has also been used in other channel choice (Boehm & Gensler, 2006) and store choice studies (Demoulin & Zidda, 2008)

In the interests of space and brevity we tested but do not include models which incorporated channel measurements, such as channel satisfaction and attitude and consumer characteristics such as involvement and expertise. None of these substantially improved the fit of the models, so we do not report the results. These are available from the authors.

Results and Discussion

We used the SAS 9.1 NLP procedure to estimate the parameters of the models. For each estimated model, we report in Table 2 the measure of fit, ρ^2 . As suggested by McFadden (1976, p. 41), a ρ^2 value between 0.2 and 0.4 can be considered as an excellent fit. Our models exceed that in all cases. The models each have three sections. The first provides the constants associated with the channel choice, using supermarkets as the comparison. Following from Boehm and Gensler (2006) we compare the consumer perceptions of each channel in regard to price, quality, convenience and risk. In addition we compare the perceptions of consumers who are not customers of that channel to get an idea of why they might not use the channel. We also include a loyalty measure based on the last channel shopped.

Channel choice

First, we can see that there are differences in the estimated constants across the channels for many of the occasions. Supermarkets are the preferred channel for all usage situations. For some of the occasions specialty stores are seen as equally preferred to supermarkets: for gifts, elaborate wine dinners, and for a party.

There are quite a few instances when non-supermarket channels are significantly less preferred for specific occasions. Wine fairs and direct sales are less preferred to supermarkets for gifts, personal consumption, intimate and elaborate wine dinners, wine to age, and for parties. Specialty stores are also less preferred than supermarkets for purchasing wine for personal consumption and for an intimate dinner. It seems that in Belgium, supermarkets are by far the most preferred channel across the majority of occasions. We also see that loyalty to the most recent channel is positive across each occasion showing that experience and habit are important determinants of the next shopping channel.

Channel Characteristics

The reasons for the choice of channels for specific situations show more differences than channel choice. We will first consider the reasons users choose specific channels for specific situations and then look at non-users of the channels. Low price is an important consideration in channel choice for personal consumption, which is similar to the finding of Gehrt and Yan (2004). Low price does not affect channel choice for the other situations. Channel quality as measured by assortment and service does not drive channel choice for any of the occasions. On the other hand, risk reduction is an important factor in each situation except for a party, with the highest for buying wine to age. Channel convenience drives channel choice for gifts, personal consumption and for an intimate dinner, but is not that important for elaborate wine dinners, wine to age and parties.

Table 2. Parameter Estimates for Six Wine Usage Situations

<i>Wine purchase situations</i>	<i>Gift</i>	<i>Personal consumption</i>	<i>Intimate dinner</i>	<i>Elaborate dinner</i>	<i>Wine to age</i>	<i>Party</i>
<i>Channel constants</i>						
Supermarkets (ref.)	0.00 (----)	0.00 (----)	0.00 (----)	0.00 (----)	0.00 (----)	0.00 (----)
Specialty stores	0.24 (0.18)	-0.46 ** (0.21)	-0.90 *** (0.23)	0.21 (0.21)	0.22 (0.22)	-0.11 (0.21)
Wine Fairs	-1.31 *** (0.26)	-1.08 *** (0.24)	-1.82 *** (0.38)	-1.09 *** (0.31)	-0.43 * (0.25)	-1.15 *** (0.28)
Internet & Catalogues	-1.31 *** (0.29)	-0.91 *** (0.23)	-1.48 *** (0.28)	-0.94 *** (0.29)	-0.75 *** (0.27)	-0.82 *** (0.31)
<i>Estimates for channel users</i>						
Price	0.02 (0.08)	-0.20 ** (0.09)	-0.09 (0.1)	-0.01 (0.09)	-0.08 (0.1)	-0.16 (0.1)
Quality	0.11 (0.18)	-0.04 (0.14)	0.09 (0.16)	0.02 (0.14)	0.14 (0.16)	0.19 (0.16)
Convenience	0.20 ** (0.09)	0.21 * (0.11)	0.20 ** (0.1)	0.02 (0.09)	0.03 (0.1)	0.06 (0.1)
Risk	-0.35 ** (0.14)	-0.23 * (0.12)	-0.31 ** (0.12)	-0.38 *** (0.14)	-0.49 *** (0.14)	-0.22 (0.15)
Loyalty	1.23 *** (0.13)	1.12 *** (0.14)	1.27 *** (0.16)	0.96 *** (0.15)	1.66 *** (0.18)	1.18 *** (0.16)
<i>Estimates for non channel users</i>						
Price	-0.10 (0.18)	-0.12 (0.3)	0.09 (0.32)	-0.43 ** (0.17)	-0.44 * (0.22)	-0.19 (0.21)
Quality	0.47 ** (0.23)	0.16 (0.34)	0.00 (0.29)	0.53 ** (0.22)	0.78 *** (0.3)	0.36 (0.27)
Convenience	-0.09 (0.17)	-0.01 (0.25)	0.24 (0.25)	-0.23 (0.16)	-0.12 (0.15)	0.06 (0.18)
Risk	-0.68 *** (0.21)	-0.87 *** (0.29)	-1.02 *** (0.38)	-0.83 *** (0.2)	-1.05 *** (0.26)	-0.92 *** (0.28)
<i>Model fit</i>						
$\ell(0)$	-27310	-27310	-27310	-27310	-27310	-27310
$\ell(\beta)$	-14236	-12505	-10301	-15547	-15704	-15033
ρ^2	0.479	0.542	0.623	0.431	0.425	0.450

Note: Standard errors in parentheses; *** $p < .01$, ** $p < .05$, * $p < .1$.

It is illuminating to see the perceptions of non-channel users for the specific situations. Across all situations, risk reduction is the most important factor. In order to convert non-users, channel marketing strategy should include some means of reducing perceived risk. There are differences between the situations. Risk reduction is the only significant factor for non-users buying wine for personal consumption, intimate dinners and parties. The coefficients are much higher than for channel users, which show the importance of risk reduction in order to attract non-shoppers. There are some specific issues, which must be addressed for the different occasions if non-users

are to be attracted to a channel. Channel quality must be better perceived for purchasing wine as a gift, for an elaborate dinner, or for wine to age. The perception of high prices is part of the reason some users do not buy wine at a different channel for elaborate dinners and for aging.

Overall, this research is one of the first to try and incorporate usage situation into channel choice. Previous work on situational effects found a strong interaction with product choice, but the research has been limited to only a few product categories. This research highlights the differences in channel choice for some occasions and the drivers of that choice for users. An added contribution is the measurement of why non-users do not choose that particular channel.

Limitations and future research

As in many exploratory studies there are issues with the generalizability of our sample to a wider population. It is likely that the findings will be similar in countries where supermarkets dominate wine sales, but this needs empirical testing. It should be noted that we do not report other models we tried, because they did not add to the variance accounted for. The addition of channel satisfaction and attitude towards the channel did not improve the models. This may be due to collinearity with the other variables rather than the added variables having no effect at all. However, our parsimonious models had a high amount of variance accounted for. A more interesting area for future research to add to our findings would be to cluster the respondents into segments based on channel preference and perception of channel characteristics. It is likely that the choice and perceptions of the different channels across the usage situations are heterogeneous. Some people may have less experience with some occasions or channels. Some may choose the same channel for every occasion, but others may switch channels for specific situations. Clustering would also allow the addition of consumer-specific variables, such as demographics and wine consumption habits, which are likely to help explain some of the differences. Our specification of the models resulted in reasonably large amounts of variance accounted for, but may be averaging across differences and thus, hiding them.

Our specification also does not allow us to test for significant differences between the models. Comparing the coefficients between choice models is not possible unless the scale parameter can be accounted for (Swait & Louviere, 1993). Another possibility would be to put the situations as dummy variable into a single model and see which ones are significantly different. We chose not to do this because of the difficulty of interpreting the coefficients for the other important variables as functions of each situation. Our objective was to explore differences in channel choice for different usage situations and to focus on the channel characteristics, usage, and consumer perceptions, which our straightforward models allow us to do. Finally, it would be better to have larger numbers of consumers in the direct and wine fair channels in order to have more data points to model the differences.

Conclusion

The availability of multiple channels facing consumers is growing and at the same time much of the research has been focused on the retailer's perspective for channel management. Fewer articles have looked at consumer choice of channels and still fewer have looked at how different usage situations affect consumer choice of channels. We chose to look at wine as a category with

multiple channels and a range of usage situations. Our data showed that consumers are widely experienced at buying wine for the 6 different situations we used and that many shop multiple channels. We provide a first look at what seems to drive consumers to choose different channels for different usage situations. It is clear that experience and perceived risk are the two factors most important in channel choice across all wine usage situations. People tend to use the channels they used for the previous purchase occasion. Not surprisingly, the least used channel - the Internet - is perceived to be the most risky. Retailers wishing to grow their Internet sales will have to develop means of reducing the risk perceived with ordering wines online. It is also interesting that for non-users convenience was not really a differentiating factor between the channels, but it is for existing channel users. Again, retailers wishing to attract consumers to different channels may also have to increase the perceived convenience associated with the channels outside of supermarkets.

Our research did show differences in the coefficients between the usage situations. Therefore consumers do perceive differences in channels depending on the situation for which they are buying wine. Previous research has shown consumers use different attributes in choosing products for different situations, but this research shows similar differences between choosing channels for a physical product, rather than for financial services. Today's consumer is offered more and more choices for both products and places to buy them. This research shows that usage situations affect the evaluation and choice of the possible places to buy products.

References

- Baiden, J. (2000). Multi-channel marketing: changes in retail, catalog and the Web. Presentation at the *Chicago Direct Marketing Days*, Emerald, February 24.
- Becker, G. (1965). *The Economic Journal*, 75, (299), 493-517.
- Belk, R. W. (1974a). An exploratory assessment of situational effects in buyer behavior. *Journal of Marketing Research*, 11, 156-163.
- Belk, R. W. (1974b). Application and analysis of the behavioural differential inventory for assessing situational effects in consumer behavior. *Advances in Consumer Research*, 1, 337-388.
- Ben-Akiva, M., Lerman, S. R. (1985). *Discrete Choice Analysis: Theory and Application to Travel Demand*. Cambridge, MA: MIT Press.
- Black, N. J., Lockett, A., Ennew, C., Winklhofer, H., & McKechnie, S. (2002). Modelling consumer choice of distribution channels: an illustration from financial services. *International Journal of Bank Marketing*, 20(4), 161-173.
- Boehm, M., & Gensler, S. (2006). Modeling the channel choice behavior of banking customers. *Proceedings of the 35th EMAC Conference*, Athens.
- Demoulin, N. T. M., & Zidda, P. (2008). On the impact of loyalty cards on store loyalty: Does the customers' satisfaction with the reward scheme matter? *Journal of Retailing and Consumer Services*. Forthcoming.
- Dickson, P. R. (1982). Person-Situation: Segmentation's missing link. *Journal of Marketing*, 46 (Fall), 56-54.

- Dubow, J. (1992). Occasion based vs. user based segmentation. *Journal of Advertising Research*, March/April, 11–18.
- Gehrt, K. C., & Yan, R.-N. (2004). Situational, consumer, and retailer factors affecting Internet, catalog, and store shopping. *International Journal of Retail & Distribution Management*, 32 (1), 5–18.
- Green, P. E., & Rao, V. (1972). Configuration synthesis in multidimensional scaling”, *Journal of Marketing Research*, 9 (February), 65–68.
- Hall, J., & Lockshin, L. (2000). Using means-end chains for analysing occasions – not buyers. *Australasian Marketing Journal*, 8 (1), 45–54.
- Lewin, K. (1936). *Principles of topological psychology*. New York: McGraw Hill.
- Lockshin, L., Spawton, A., & Macintosh, G. (1997). Using product, brand and purchasing involvement for retail segmentation. *Journal of Retailing and Consumer Services*, 4 (3), 171–183.
- Lockshin, L., Jarvis, W., D’Hauteville, F., & Perrouy, J. (2006). Using simulations from discrete choice experiments to measure consumer sensitivity to brand, region, price, and awards in wine choice. *Food Quality and Preference*, 17, 166–178.
- Lockshin, L., & Hall, J. (2003). Consumer purchasing behaviour for Wine: What we know and where we are going. *Proceedings of the International Wine Marketing Colloquium*, Adelaide, July, CD-ROM.
- Lockshin, L., & Kahrimanis, P. (1998). Consumer evaluation of retail wine stores. *Journal of Wine Research*, 9 (3), 173–184.
- McFadden, D. C. (1976). The theory and practice of disaggregate demand forecasting for various modes of urban transportation. University of California, Institute of Transportation Studies, Berkeley, CA.
- Nicholson, M., Clarke, I., & Blakemore, M. (2002). One brand, three ways to shop: situational variables and multi-channel consumer behaviour. *International Review of Retail, Distribution and Consumer Research*, 12 (2), 131–148.
- Perrouy, J. P., d’Hauteville, F., & Lockshin, L. (2006). The influence of wine attributes on region of origin equity: An analysis of the moderating effect of consumer’s perceived expertise”, *Agribusiness: An International Journal*, 22 (3), 323–341.
- Reardon, J., & McCorkle, D. E. (2002). A consumer model for channel switching behaviour. *International Journal of Retail & Distribution Management*, 30(4), 179–185.
- Scott, A. (2001). Online shopping on the rise. *The Internal Auditor*, 58 (1), 15–16.
- Sandell, R. G. (1968). The Effects of attitudinal and situational factors on reported choice behavior. *Journal of Marketing Research*, 4, 405–408.
- Schoenbachler, D. D., & Gordon, G. L. (2002). Multi-channel shopping: understanding what drives channel choice. *Journal of Consumer Marketing*, 19(1), 42–53.
- Sonneck, P., & Ott, C. S. (2006). Future trends in multi-channel retailing. In *Retailing in the 21st century: Current and future trends*. M. Krafft and M. K. Matrala (Eds.). Berlin: Springer,

175–192.

Srivastava, R. K. (1980). Usage-situational influences on the perceptions of product markets response homogeneity and its implications for consumer research. *Advances in Consumer Research*, 7, 644–649.

Srivastava, R. K., Shocker, A. D., & Day, G. S. (1978). An exploratory study of the influences of usage situation on perceptions of product markets. *Advances in Consumer Research*, 5, 32–38.

Swait, J., & Louviere, J. (1993). The role of scale parameter in the estimation and comparison of multinomial logit models. *Journal of Marketing Research*, 30 (August), 305–314.