SPANISH WINE CONSUMER BEHAVIOR: A CHOICE EXPERIMENT ANALYSIS

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Abstract

Choice experiments or choice based conjoint analysis have grown in popularity since their introduction at the beginning of the eighties. The use of choice experiments has been extended to many disciplines such as transportation, environment, telecommunication and marketing but also to agro-food products. In the last years, many academics have employed choice modelling to analyse wine consumer behaviour. In Spain, no research has been undertaken yet using choice modelling techniques to analyse wine consumer behaviour.

The objective of this paper is to analyse the choice behaviour of Designation of Origin (DO) wine consumers. At the opposite of table wine, DO wine consumption in Spain is increasing and its consumption per capita is around 7.9 litres. The stated choice experiment will consist on presenting cards to wine consumers including characteristics of hypothetical bottles of wine. The attributes chosen, with 3 or 4 levels, to design the experiment have been: DO region, grape variety, price, wine age and brand. We will estimate all main-effects and some two-factor interaction effects that we suspect they could be of interest in explaining choice behavior. This implies that the orthogonal fractional factorial design should be at least of resolution V. Orthogonal resolution V designs often require more runs than lower resolution designs, that is why when some (but not all) of the two-factor interactions are known a priori to be important, a fractional plan which is a compromise between main-effects only plans and resolution V plans, is sought for.

The model chosen for the estimation process has been from the discrete choice models. Multinomial Logit (MNL) has been widely used by researchers for its simplicity and practicability. Nevertheless, MNL models rely on the assumption that the error terms are independently and identically distributed (IID). This assumption is quite restrictive and in some case doest not hold. Other models like Generalized Extreme Value models (GEV) (Nested Logit, Paired Combinatorial Logit, Generalized

Nested Logit), Mixed Logit, Multinomial Probit, relax the restriction of the IID distribution of the error term, but at the same time, some of them need a more complex estimation process by simulation. A simpler model, which relaxes the errors distribution assumption and count for the effect of the other alternatives on the chosen alternative, is the called Universal Logit or Mother Logit model.

The estimation of the attribute utility effects will provide interesting results regarding the importance of each attribute or the combination of two attributes on wine consumer decision choice. This will help wine producers and distributors to develop products that approach consumers' expectations. Part-worth (trade-off) between attributes will be also estimated, by calculating the rate at which respondents are willing to trade-off one attribute for another.