Wine market is wide and crowded, which makes it difficult for a new brand to compete. Because even though the new product might be excellent from a sensory perspective, this will not matter unless the consumer actually buys and drinks the wine for the first time. On top of that, many consumers incur in risk-minimizing behavior when buying wine. In this paper, a hybrid discrete choice model is used to analyze wine consumer preferences when only extrinsic (i.e. non-sensory) attributes are available.

Label design, grape variety, alcohol content, recommendation, price and discount were identified as the most relevant extrinsic attributes from the consumer's standpoint. These attributes were selected based on existing literature, a Delphi survey (an expert consensus-reaching survey set), a web survey answered by 843 wine consumers and 14 in-depth interviews with consumers. Not all sources were consistent on which attributes were the most important. Notably, consumers did not pointed out price as a relevant attribute on the web survey, even though several in-depth interviewed consumers mentioned it as been very relevant. Alcohol content, on the other hand, even though wasn't identify as very important by consumers, was included anyway in the study because of its relevance for producers. Not brand neither winery were considered in the experiment because of their great correlation with sensory omitted variables, which were supposed to remain unknown by the respondents (so she/he would only choose based on extrinsic cues).
To assign a relative measure of importance to each attribute, an on-line declared preferences experiment -which simulated a purchase at a specialty store, for a casual meal with friends- was set up. A fixed fictional brand was used for all wines on the experiment, and a D-efficient experimental design was constructed to maximize information. A total of 274 regular wine consumers participated in the experiment, all of whom had already answered the previous web survey, where demographic, behavioral and attitudinal data for each of them was gathered.

A hybrid discrete choice model was estimated with the available data. Three latent variables based on consumer's demographics were constructed to capture heterogeneity in taste (sophistication and sociality) as well as to correct for price endogeneity (price-quality association). Sophisticated consumers were found to be (with greater probability) males living in small households (in terms of number of inhabitants) with higher income. Social-oriented consumers, instead, seem to also be males but from big households and lower income, as well of having no post-grad education. Finally, the consumers who most strongly relate price and quality appeared to be older, from big households, with no post-grad education and of lower income.

En general terms, Grape variety was found to be the main driver of purchase intention, yet, individual preferences for it had to be considered. Low alcohol content was disliked by the consumers, as apparently, they associated it with low quality wine. Critic's recommendation had the larger impact of all sources of advice, above that of friend's and salesman's. Label design was found to have marginal impact in the final purchase decision, probably because it's main effect is to capture the consumer's attention on a shelf with many alternatives, but not influence the final decision. Discounts were liked by the consumers, but their effect decay as they grow bigger. Finally, price was highly endogenous, because consumers associated price and quality strongly. This did not allowed to obtain a trustworthy weight for price, and therefore, overstated willingness-to-pay for attributes were found. Nevertheless, using a latent variable that directly measures the association between price and quality seems to be a promising approach to overcome this problem.

The more sophisticated the consumers are, the less they are influenced by the alcohol content of wine and their rejection for Merlot increases. This kind of consumers value a friend's advice on wine less than the rest of consumers. Social-oriented consumers are more strongly influenced by the grape variety than other kinds of consumers, and in particular, they are more strict about their own personal ranking of varieties (i.e. they are less likely to trade one grape variety for another). They seem to prefer labels with high contrast designs. As a consumer more strongly associates price and quality, she/he also appreciates discounts more. This is reasonable as discounts greatly increase the value of the product, given that the price before discounts is assumed to be a good indicator of the product's quality.

Hybrid discrete choice models are useful when modeling wine choice. They allow to reproduce the actual exercise of choosing one alternative from an available choice set, just as any consumer does at a retail store. The estimated model proved to be effective measuring relative weights of attributes, as well as providing statistical significance for them using a reasonable sized sample. Even more, the use of latent variables allows to link differences in preferences to observable demographic characteristics of consumers in a reliable way.

This papers contains the results of the first year of work of a four years research been carried away in Chile. Following work will focus on the impact of intrinsic (i.e. sensory) attributes on choice, and how these attributes interact with extrinsic ones.