# Bordeaux 2016 Abstract Submission

**Title**

Consumer Behavior: an experimental investigation of risk taking when buying wine

**I want to submit an abstract for:**

Conference Presentation

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**Keywords**

Risk behavior; uncertainty and ambiguity, wine economics.

**Research Question**

What is the impact of perceived risk and character on the willingness to buy and to pay for a bottle of wine?

**Methods**

The experiments are conducted through a choice-based questionnaire to reflect the consumer oriented decision of the purchase of a bottle of wine based on a posted price.

**Results**

The present study demonstrates that changes in the manner in which information is presented, without any underlying change in problem structure, affects observed preferences when buying wine.

**Abstract**

Consumer Behavior: an experimental investigation of risk taking when buying wine

Summary for submission to the American Association of Wine Economists (AAWE)

10th Annual Conference in Bordeaux, France.

J. François Outreville Jean Desrochers
Abstract:

The purpose of this paper is to investigate differences in expressed attitude as a function of the manner in which probability information is communicated. The experiments are conducted through a choice-based questionnaire to reflect the consumer oriented decision of the purchase of a bottle of wine based on a posted price. The experiments reported in this paper are based on questionnaires distributed to 268 participants in multiple samples and examine the behavior of people when faced with different information on the probability of loss. The present study demonstrates that changes in the manner in which information is presented, without any underlying change in problem structure, affects observed preferences when buying wine. The impact of perceived risk and character on the willingness to buy and to pay for a bottle is analyzed and show that price habits and perceived risk are the main factors affecting the willingness to pay for a bottle of wine.

Introduction

Different people will respond to similar risky situations in very different ways. Early experiments undertaken by economists and psychologists attempt to define profiles of risk-taker and risk-averse persons. Differences in the behavior of individuals facing similar risky situations could be partially explained by the individual’s family background, gender, age, education, position, prior experience, and geographical location (Dohmen et al., 2011).

In normative decision theory, uncertainty about the occurrence of an event is treated by the single dimension of probability (Chow and Sarin, 2001). The famous Ellsberg paradox demonstrates that uncertainty about probabilities can affect people’s decision behavior (Ellsberg, 1961). Under uncertainty, several experiments following Tversky and Fox (1995) have shown that the individual probability judgments affect the shape of the utility function in both gain and loss domains (Health and Tvesrky, 1991; Abdelllaoui et al., 2005; Maffioletti and Santoni, 2005). Chow and Sarin (2002) find that people prefer when probabilities are precise (known information) and they feel insecure when there is unknown information, because they think someone else possesses the information. A large literature has studied the consequences of uncertainty and ambiguity in behavioral economics and finance using urn choices like in Ellsberg (1961), but only few experiments are conducted with questionnaires in a more consumer oriented decision of the purchase of a product (a bottle of wine) based a posted price.

The review of the literature also reveals some confusion in concepts and terminology. In most research papers, writers use ambiguity to refer to imprecise probabilities. Ambiguity is a term that has been used with the modal usage equating it with vagueness (see Budescu, Weinberg and Wallsten, 1988). Ambiguity arises from the perception of missing information (Frisch and Baron, 1988). Curley and Yates (1985 and 1989) clarify the measurement of ambiguity by examining the possible range of probabilities and show that ambiguity aversion increases when the range of the interval increases. Smithson (1999) elaborates further on the distinction between two different sources of ambiguity: imprecision and conflict. He suggests using conflict to refer to disagreement among sources and ambiguity in cases where a source provides conflicting or uncertain evidence.

The purpose of this paper is to examine the comparative effects between a known risk, with reference to Chow and Sarin (2002), uncertainty defined as the lack of information, i.e. typically an urn context in the sense of Ellsberg (Camerer and Weber, 1992; Pulford and Colman, 2007 and 2008) and ambiguity in the sense of Curley and Yates (1985), i.e. a range of probabilities. The experiments reported in this paper try to shed some light on this issue by analyzing choices within the framework of a purchase decision. It provides an example of a study of human behavior when aversion towards loss is considered. Research in the loss domain has developed considerably (L’Haridon, 2009), but no study (to our knowledge) has investigated the behavior of people when
facing different situations within the same context: a risky situation (the probability of loss in known), an uncertain situation (there is no prior information on the probability of loss) or an ambiguous situation (the information provided is vague). Also, little systematic research has investigated differences in expressed attitude as a function of the manner in which vague probability information is communicated to a decision maker.

The experiments are conducted through a choice-based questionnaire to reflect the consumer oriented decision of the purchase of a product (a bottle of wine) based on a posted price. Buying a bottle of wine is often marked by expectations and uncertainty as to its quality and subjects were given some background information on possible functional risks associated with the purchase of a bottle. The experiments reported in this paper are based on questionnaires distributed to 268 participants in multiple samples.

Even though there is no unanimous agreement on a precise definition of ambiguity, the imprecise information can either be with respect to the underlying probabilities or to the range of possible outcomes (Budescu et al., 2002; Du and Budescu, 2005; Onay et al., 2013). In this paper, the experiment assumes there is no ambiguity on the range of possible outcomes.

The paper is organized as follows. In section two we examine the relevant literature to develop the hypothesis to be tested in the paper. In the next two sections, we present a detailed explanation of the context that is used for the experiments and the results of the experimental designs. We continue in section 5 with an analysis of the willingness to buy and the willingness to pay for a bottle of wine. Finally, in section 6, we draw conclusions and discuss the practical impact of our findings.