



Demand for French baguette: Do BDM mechanism and real choice experiment give similar results?

E. Ginon^{a1}, C. Chabanet^a, P. Combris^b, S. Issanchou^a

^aCentre des Sciences du Goût et de l'Alimentation, UMR6265 CNRS, UMR1324 INRA, Université de Bourgogne, Agrosup Dijon, F-21000 Dijon, France

^bALISS, INRA, 65, Bd de Brandebourg, 94205 Ivry-sur-Seine cedex, France

¹ Research scientist, LESSAC, ESC-Dijon –Bourgogne, France

Abstract

The aim of this study was to compare two non-hypothetical approaches commonly used to reveal consumer willingness to pay. The accordance between these two methods can be examined at an aggregate level by comparing demand curves. One hundred and seventy-seven participants tested 4 baguettes in each task. For the real choice experiment, participants were faced to 17 scenarios. In each scenario, consumers chose between the four baguettes at various prices and a 'no purchase' option. To compare data obtained with both methods we estimated demand curves for each baguette. We observed small differences between demand for French baguette obtained with the BDM mechanism and the real choice experiment.

Keywords: Consistency, Real choice experiment, Willingness to pay, Demand curves

1. Introduction

In developed countries there is a great competition between food suppliers. One consequence is product differentiation. In this context, a key question is to evaluate consumer valuations of closed substitutes for a given product category. These substitutes can vary on different characteristics such as their sensory characteristics, their nutritional characteristics, their safety, their convenience and their type of production. Researchers in agricultural economics recommend using non-hypothetical methods to avoid that consumers overestimate the price they are ready to pay for a given product (Lusk and Shogren 2007). For many years, researchers have used experimental auctions that permit to directly reveal consumer willingness to pay. Two approaches are currently used: the Vickrey auction (Vickrey 1961) and the Becker-DeGroot-Marschak (BDM) mechanism (Becker, et al. 1964). The BDM mechanism is more and more used in the agribusiness field in particular because it is easy to explain, especially when participants are not students but are recruited from the general population. The willingness to pay corresponds to the maximum price (or reservation price) that participants would accept to pay, i.e. to the price equal or below which participants will be pleased to buy the product and above which they will refuse to buy the product. However, the BDM mechanism is a non familiar task. In the majority of field buying situations, consumers are faced with different products, each one at a given price and, choose which one they buy. This choice depends on product characteristics, price and consumer budget constraints. Real choice experiments have been recently introduced by Lusk and Schroeder (2004) to obtain consumer willingness to pay for close substitutes in a situation more similar to a shopping situation than an auction. In a real choice experiment, as in a conjoint analysis, participants are faced with two or more substitutes, each one at a given price. They are asked to choose the one they accept to buy. The procedure is non-hypothetical in the sense that