An Analysis of Maritime Ro-Ro Freight Transport Service Attributes through Adaptive Stated Preference: an Application to a Sample of Freight Forwarders

Angela Stefania Bergantino\textsuperscript{1*} and Simona Bolis\textsuperscript{2}

\textsuperscript{1} Department of Economics, University of Bari, Italy
\textsuperscript{2} IRE - Faculty of Economics, University of Lugano, Switzerland

Abstract

In this paper we present preliminary evidence from a pilot study carried out with the primary objective of testing the validity of adaptive conjoint data collecting methods in analysing operators’ preferences when redirecting current on-land transport services to a hypothetical maritime ro-ro service alternative. The analysis has focussed on a sample of freight forwarders. Through a combination of Revealed Preferences and Adaptive Stated Preference Experiments we have constructed a database of their preferences toward the maritime ro-ro alternative using a set of transport service attributes: price, reliability, frequency, transit time, etc. We have estimated the relevant parameters through a Tobit model and have been able to calculate relative trade-off values among the significant attributes. The resulting ranking highlights the relative importance of reliability and frequency in the decision to switch to maritime services.

Keywords: Adaptive Stated Preferences; Conjoint analysis; Ro-ro maritime service; Freight transport; Freight forwarders.

1. Introduction

The growing interest towards a re-balancing of freight traffic over the different modes has, only recently, been accompanied by significant efforts to empirically identify the factors which might exert a significant influence on the choice of operators. Although the first large scale studies date back to the early nineties, only more recently, in fact, a sistematisation of the various experiments is taking place. It is now starting to form a relatively large sample of studies and of estimated values on the determinants of the

\textsuperscript{*} Corresponding author: A. S. Bergantino (a.bergantino@dse.uniba.it).